

Clark Caton Hintz/
 Ehrenkrantz Eckstut
 & Kuhn Architects.
 2004. Passaic Riverfront
 Redevelopment Plan,
 Newark NJ. City of
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Executive Summary

Not since the development of Branch Brook Park in 1895 has Newark, had a chance to construct a large scale public open space. The Passaic Riverfront Master Plan calls for a continuous public park and riverwalk to extend from the Rt. 1-9 bridge in the south to the City's border with Belleville in the north. The proposed Minish Park esplanade has been incorporated into a more extensive riverfront park system which will serve both downtown development and the City's residential areas. When complete, the Passaic Riverfront Park proposed in this plan will cover 44 acres and therefore be 6.5 times larger than Military Park.

Extending upland, the plan connects the riverfront to the existing neighborhoods and the historic parks through a network of streets and public open spaces. Redevelopment of the riverfront in Newark is seen as the first step in creating a state Passaic River park system which extends on both sides of the river from Newark and Harrison all the way to Paterson.

Newark's front door to the region is located along the Passaic River between Penn Station and the New Jersey Performing Arts Center. This is the place where the public gets its first impression of Newark and it is here that the City must project its image for the 21st Century.

A key to the revitalization of Newark's riverfront area is to create recreation and water transit activities on the Passaic River. Once the river begins to be animated with all types of boating activity, people will be drawn to the water's edge. The Master Plan illustrates how both recreation and development activities can be integrated into an overall plan for redevelopment of the riverfront.

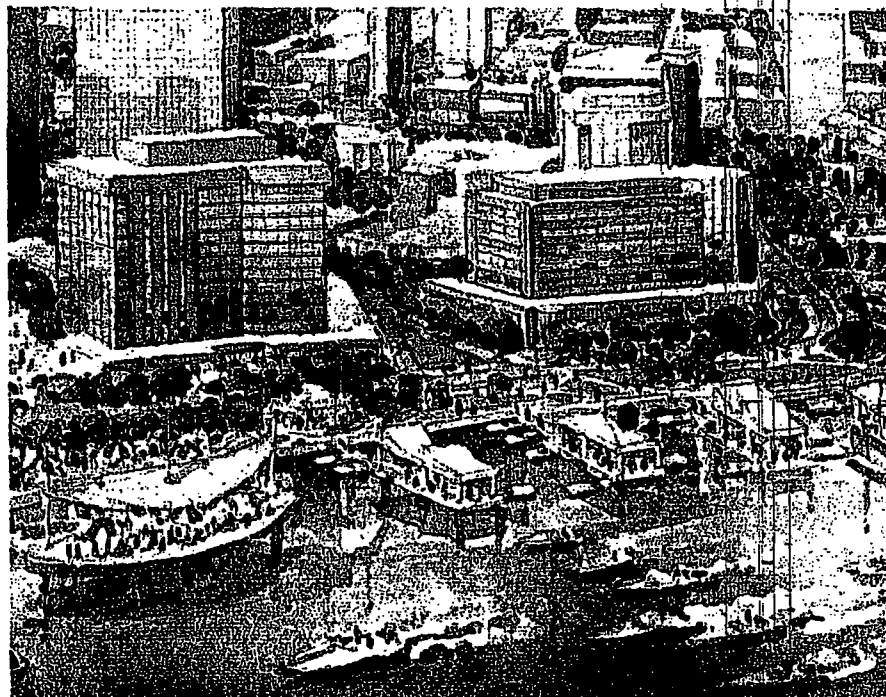
Newark is unique among American cities because it has two major railroad stations located near to its riverfront. Mass transit access to the Passaic Riverfront will soon be enhanced by the construction of Phase I of the Newark Elizabeth Light Rail Line which will connect the City's two regional rail lines.

The City and the New Jersey Department of Transportation now have the opportunity to reconstruct McCarter Highway Route 21 in the key section along the Passaic Riverfront as a beautiful city boulevard fully integrated with adjoining urban development. NJDOT's first draft of the Rt. 21 Plan has not shown the proper balance between access from the City to the river and thru traffic movement. The combination of regional railroad, light rail, improved arterial streets, and water access provides Newark's riverfront with great mixed use development potential, if all systems can be designed in concert.

A significant amount of new mixed use development is proposed for the area along the river around Penn Station and extending toward the New Jersey Performing Arts Center. Ten building sites are identified which have the capacity to accommodate 4.6 million square feet of construction. This development will be composed of a variety of uses including hotel, offices, housing and retail. The exact mix of uses for the site has been left flexible and will be finally determined by the real estate market. An overriding concern is to develop first floor uses such as shops and restaurants which will generate street level activity.

The New Jersey Performing Arts Center has set a new standard for the design of public buildings and public spaces in downtown. The design vocabulary and materials used in the NJPAC including brick and exposed steel will be extended down to the riverfront. The design of the riverwalk will match the character and quality of the NJPAC Plaza area.

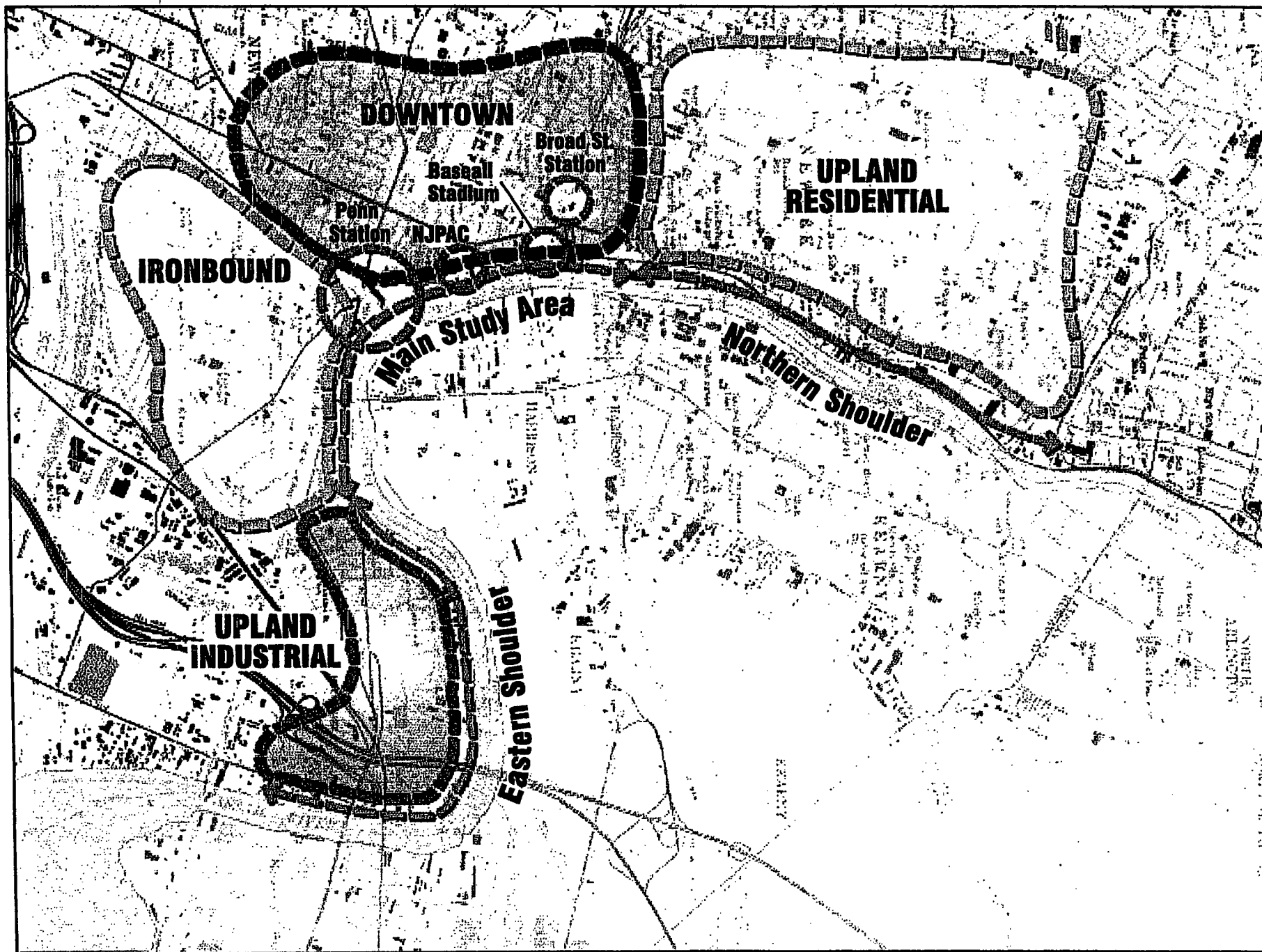
To achieve the goal of a vibrant riverfront filled with activity seven days a week, the public and private sectors must develop a true working partnership. While the rewards of this plan are great, it will take a significant community effort to implement the revitalization of the Passaic riverfront.



Introduction

A new day is dawning for downtown Newark. For the first time in several decades there is a feeling that the City has turned the corner and is on the move. The New Jersey Performing Arts Center which opened in 1997 is attracting hundreds of thousands of visitors with its world class music and drama programs. Minor League baseball has returned to the downtown with the opening of the 6,000 seat Riverfront Stadium home to the Newark Bears. The institutions of higher learning located in the city, including Rutgers University, the New Jersey Institute of Technology, the University of Medicine and Dentistry of New Jersey, Seton Hall, and Essex County Community College are expanding and creating a greater impact on the character of the downtown. The federal and state government have committed \$198 million to construct a one-mile section of the Newark-Elizabeth light rail system that will run between Penn Station and the Broad Street Station -- connecting NJPAC and Riverfront Stadium with the regional rail system. Major plans are also underway to construct a new 15,000 seat basketball/hockey arena at the intersection of Market and Mulberry Streets.

The time is ripe to push ahead with the revitalization of the Passaic Riverfront which is the gateway to of downtown Newark. Understanding the need to take action, the City in conjunction with the Passaic Riverfront Working Group and with financial assistance provided by the NJ Department of Transportation's ISTEA Program, retained Clarke Caton Hintz/Ehrenkrantz Eckstut & Kuhn to prepare a comprehensive development plan for the riverfront. CCH/EE&K's work involves an analysis of existing conditions, establishing design principles for the area, exploring development options and preparing a final development plan. During the preparation of the plan the City and the consultants conducted many meetings to solicit ideas from citizens, business interests and institutions on how the riverfront should be developed. This plan documents these efforts.



STUDY AREA INCLUDING SHOULDERS

Passaic Riverfront Revitalization

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Analysis



View of Key Development Area

The Process

The analysis of the Passaic Riverfront involved a study of existing physical conditions, as well as the history and proposed developments on and adjacent to the river in Newark. This investigation has covered a wide range of topics including land use, circulation, water activities, open space and infrastructure. The objective has been to identify the most important factors that will or should affect future development.

Project Area

The overall waterfront study encompasses the land along the Passaic River from Routes 1 & 9 and the New Jersey Turnpike crossings, west and northward to the City's border with Belleville. The length of the study area along the riverfront is 6.6 miles.

The overall study area has been divided into three parts: the main study area bounded by Clay and Brill Streets, the northern shoulder which extends from Clay Street to the city border and the eastern shoulder which encompasses the area from Brill Street to the Route 1 & 9 bridge on the east.

The River

Newark was founded in 1666 and by 1830 the city led all New Jersey communities in both population and industrial development by a wide margin. Always an important industrial and manufacturing city, Newark was home for a myriad of factories producing a rich array of products. A major stimulus for this strong industrial growth was its proximity to the Passaic River, which was both a transportation waterway and power source for Newark's early riverfront factories.

With the opening of the Morris Canal in 1831 – a 98 mile long manmade waterway comprised of a series of locks and channels connecting Phillipsburg to Newark – raw materials from the interior of New Jersey and coal from Pennsylvania could be transported to factories in Newark. Because the canal terminated at Newark Bay, Newark developed into an important port. Forty years after its construction, the canal was made obsolete by the more efficient railroad systems. The canal bed was finally abandoned in 1924 and the City purchased the right-of-way to construct Raymond Boulevard, Lock Street and the beginnings of the Newark subway.

Over time, the profusion of industrial development on the riverfront took its toll on the Passaic's water quality. Newark, like many other industrial and manufacturing towns upstream, dumped its industrial and septic wastes untreated into the river and it became polluted. Newark was forced to abandon the Passaic River as a water supply in 1889. Once the river was polluted with industrial waste, citizens had to abandon their use of the waterway for recreation and leisure activities. Swimmers, rowers, pleasure craft and gracious



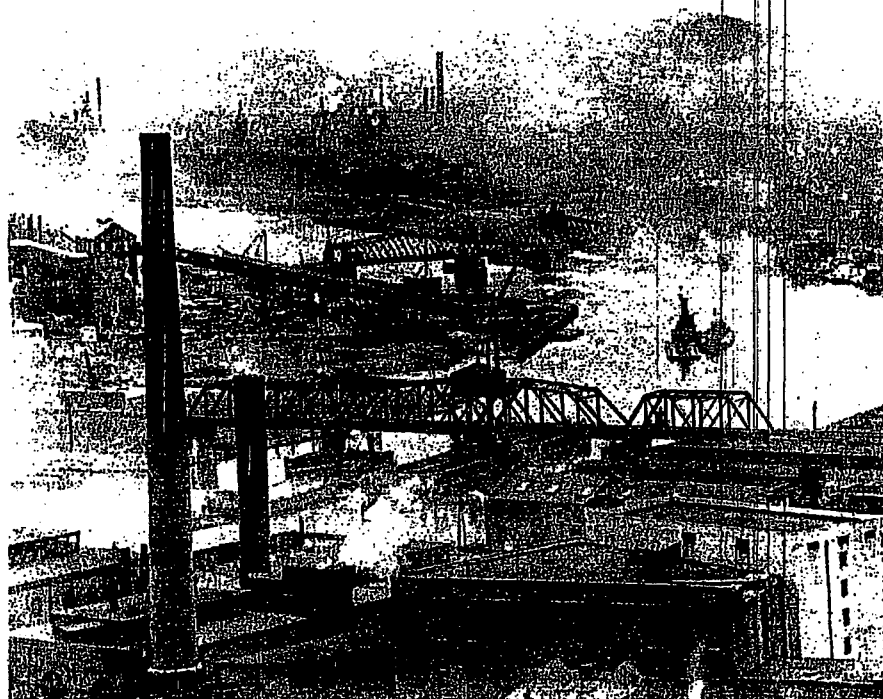
Penn Station
Railroad Bridge

Bridge St.

CITY OF NEWARK, PASSAIC RIVERFRONT (1874)

Passaic Riverfront Revitalization

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View of Railroad Crossing on Passaic, 1928

homes all disappeared. Beginning in the 1970's the federal and state governments enacted laws to prevent pollution of rivers such as the Passaic. This environmental awareness is having a positive effect on the River's water quality and each year conditions are improving.

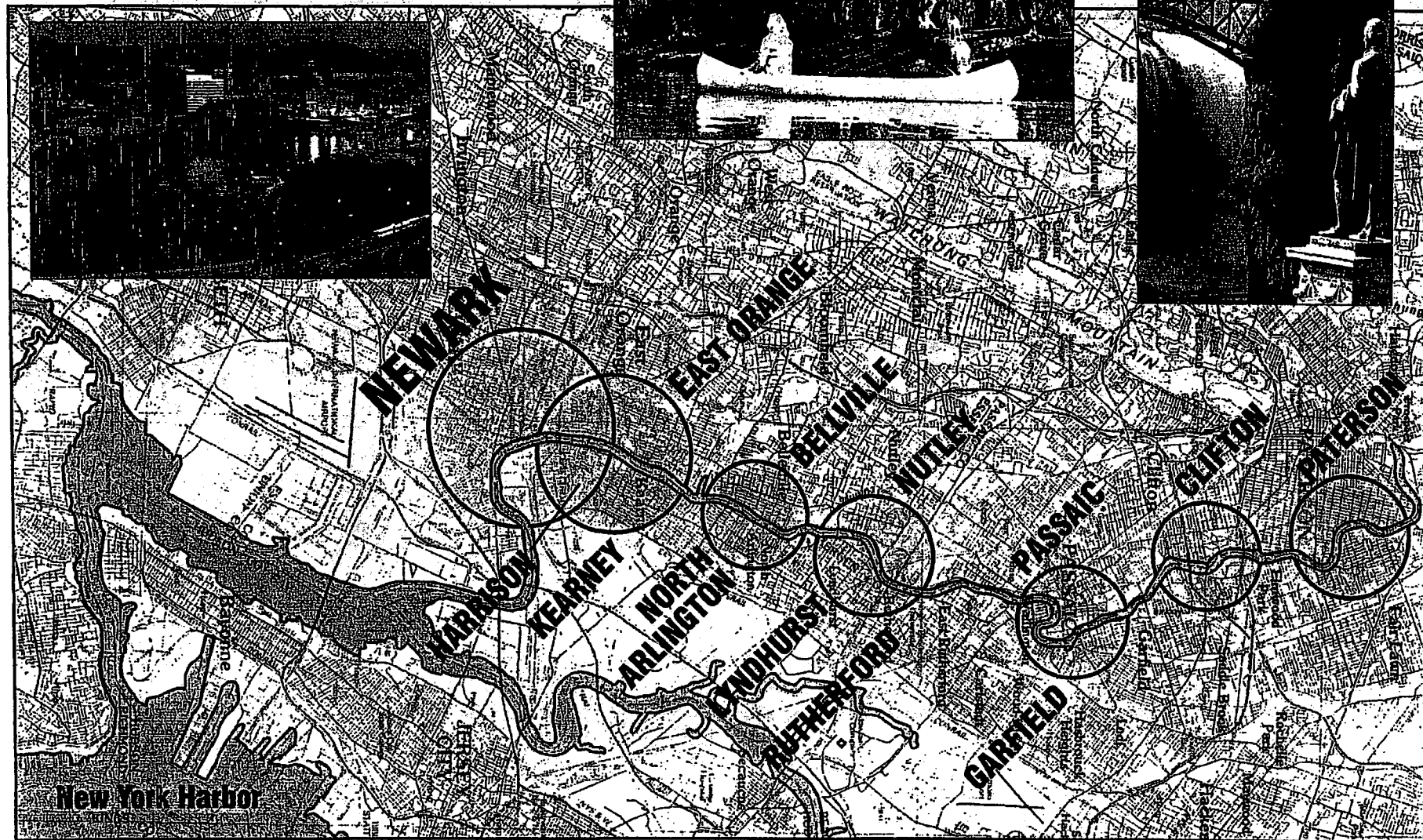
As the glacier of industrial development has melted away from the banks of the Passaic, there is a new opportunity to use the river as an open space and recreation resource. For the Passaic to reach its full potential and maximize its impact on the city, ways must be found to promote boating and recreation activities on the river.

Passaic River Communities

One long range goal of this plan is to promote the idea of a linear park system along the banks of the Passaic River which would extend from Newark to Paterson. This park system would extend 20 miles and pass through 15 municipalities that have a total population of 745,000. It will take many decades to implement such a park concept, but once in place this river corridor park system would have a tremendously positive impact on the communities along the Passaic. One could bicycle or hike significant distances along the river. Individual municipal and county parks which now exist along the river would be interconnected to create a much grander park experience. The use of the river for recreation boating would be promoted.

This scale of park system is the type of project which can only be realized with the active participation of the State of New Jersey. The State has a role to play in this situation because the Passaic River is such an underutilized resource and its own goals promote waterfront revitalization. Following is a listing of the municipalities that would benefit from the Passaic River State Park.

West Bank		East Bank	
Newark	Clifton	Harrison	Rutherford
Belleville	Passaic	East Newark	Wallington
Nutley	Paterson	Kearny	Garfield
		North Arlington	Elmwood Park
		Lyndhurst	



PASSAIC RIVER COMMUNITIES

Passaic Riverfront Revitalization



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Transportation Systems

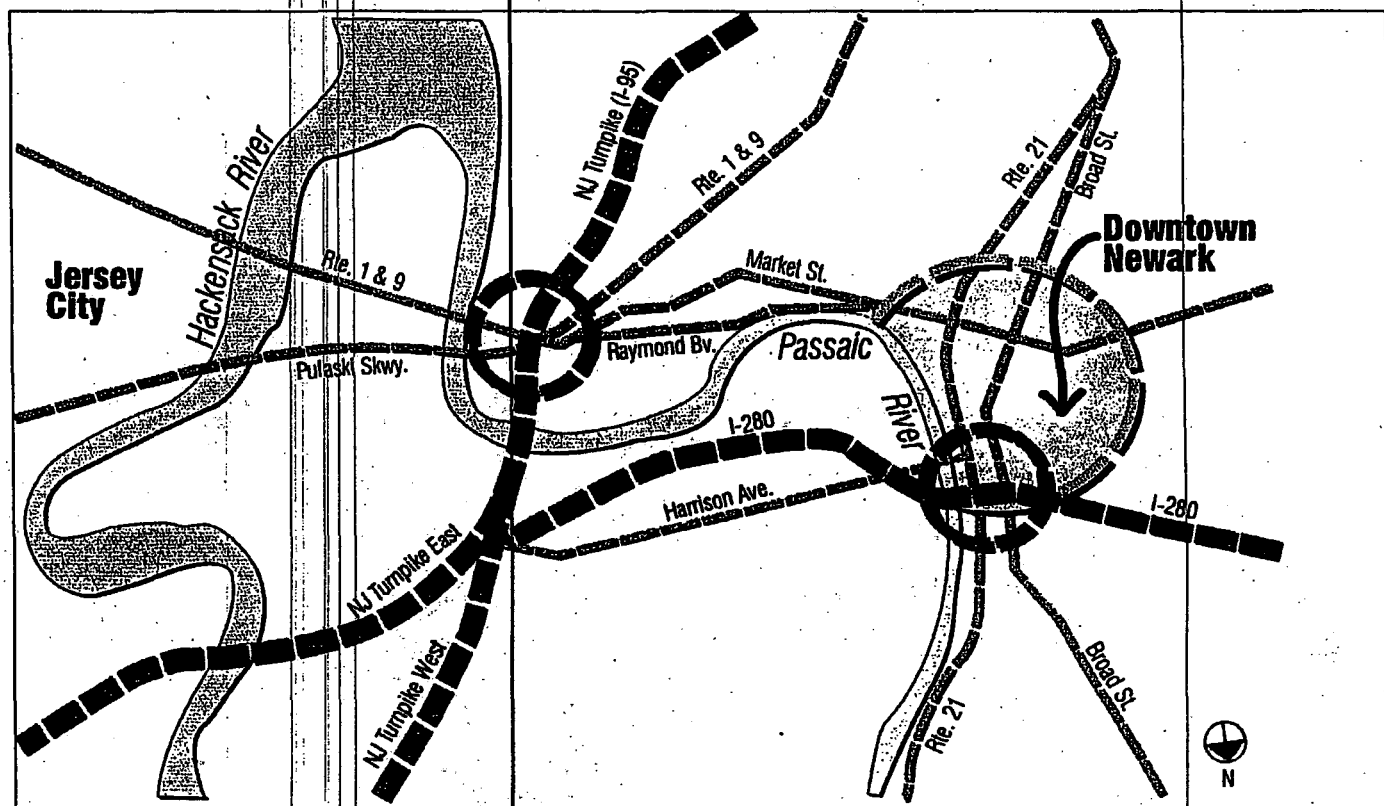
No other city in America has a downtown riverfront with more transportation infrastructure than Newark. Penn Station and Broad Street Station, two regional rail facilities, are located $\frac{3}{4}$ of a mile apart and both are in walking distance of the Passaic River. In the next few years NJ Transit will build the first phase of the Newark-Elizabeth Rail Link to connect the two regional train stations. A later phase of this light rail system will extend out to Newark International Airport.

Vehicular access to downtown Newark is provided by an excellent regional highway network including the NJ Turnpike (I-95), I-280, I-78 and the Garden State Parkway. Fortunately, downtown Newark has not been cut off from its riverfront by a major highway as is the case in so many American cities.

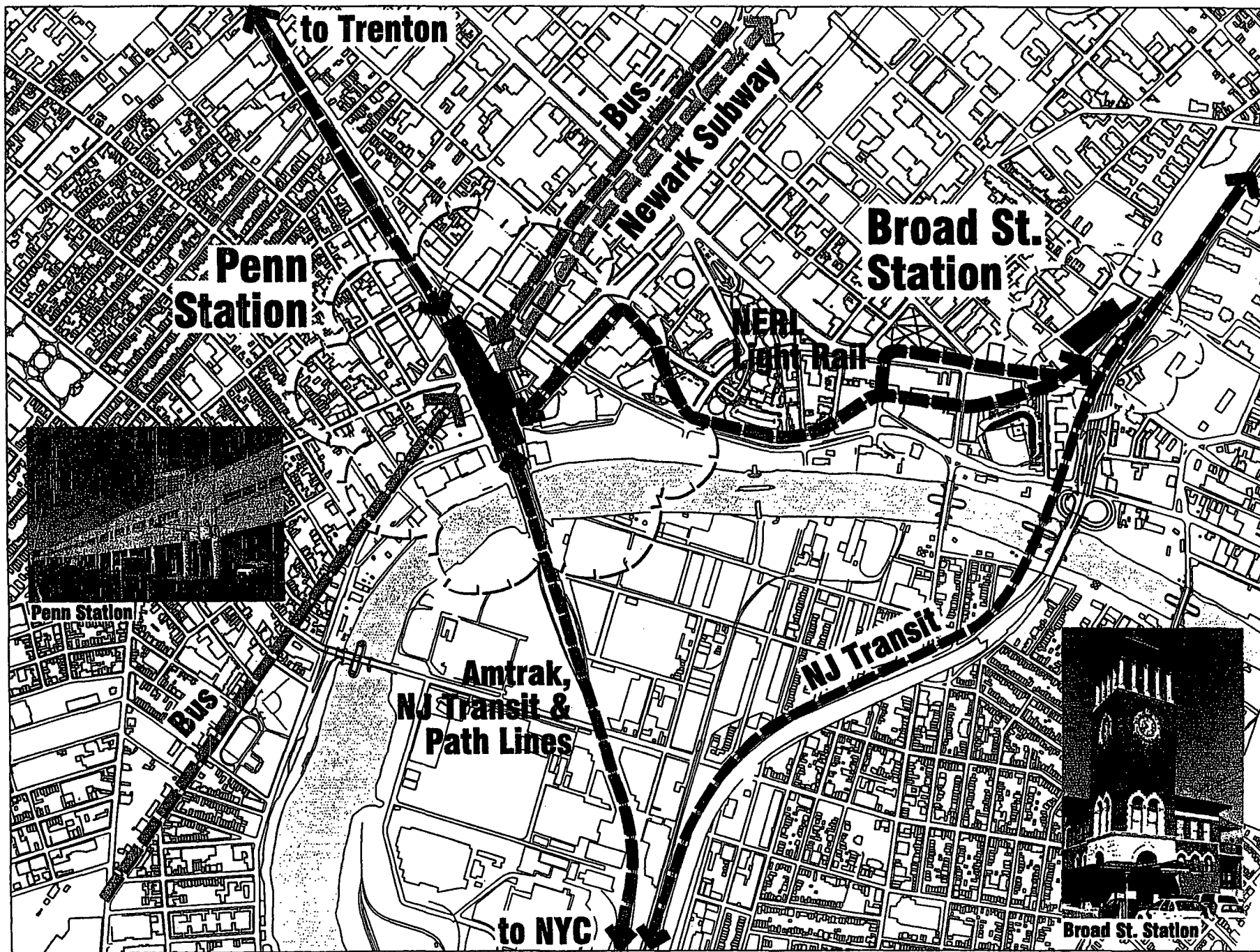
Connections between the regional highway system and downtown facilities are provided by several boulevard scale streets including McCarter Highway (Rt. 21), Raymond Boulevard, Broad and Market Streets. All these streets carry heavy volumes of traffic during peak hours. Some of this traffic going to and from downtown locations, and some vehicles are just passing through downtown Newark on their way to other destinations.

As road improvement programs are developed it is important to keep in mind that Newark's primary interest is in providing access to facilities and neighborhoods located within the city and not necessarily providing high speed regional access through the downtown.

The Passaic River has the potential of providing rapid water transportation between downtown Newark, Manhattan and Jersey City. Implementing water taxi services on the Passaic would be a natural way to build on Newark's existing transportation infrastructure and this activity would bring much needed activity to the river's edge.



Regional Highway System

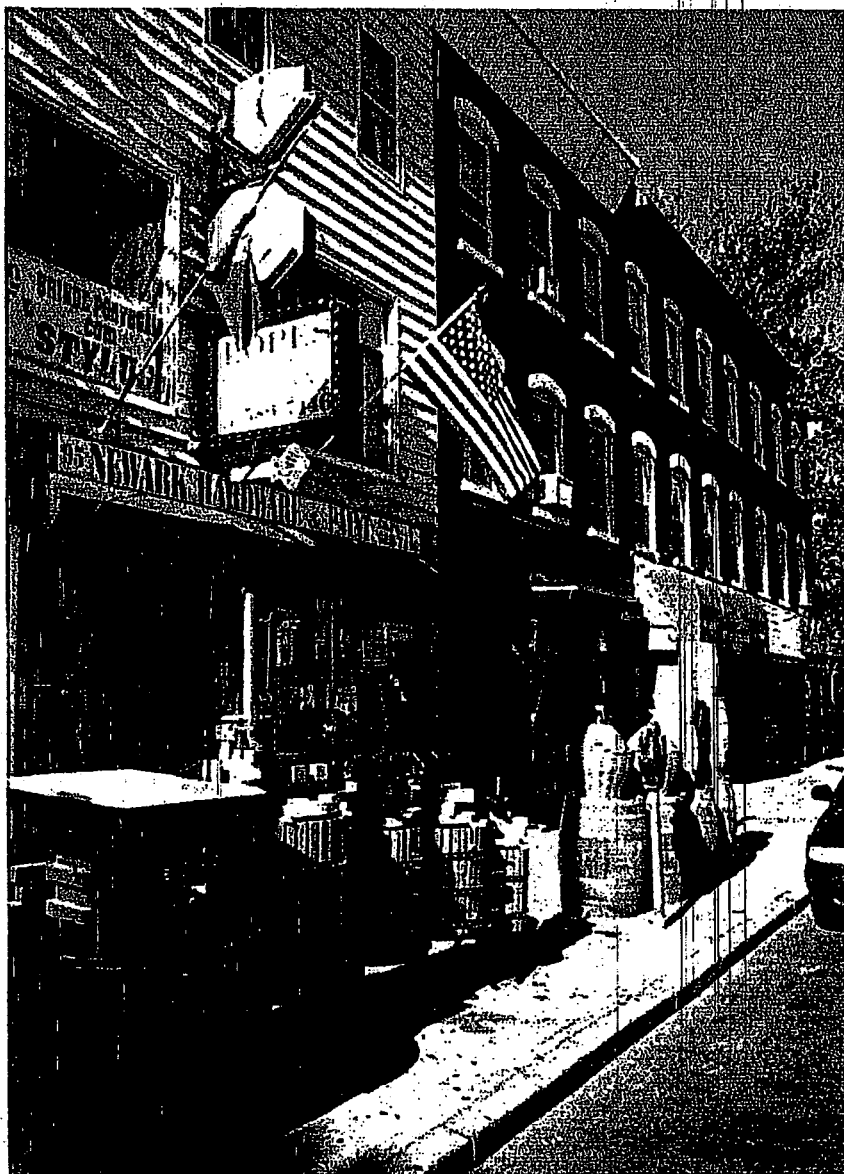


MASS TRANSIT HUB

Passaic Riverfront Revitalization



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View of stores in the Ironbound

Neighborhoods

The main study area of this plan extends 1.75 miles along the west bank of the Passaic River between Clay and Brill Streets. The edge of Newark's central business district adjoins the main study area between Penn Station and the New Jersey Performing Arts Center. South of Penn Station is Newark's Ironbound. The district adjoining the north end of the main study area includes several important city facilities including Washington Park, Riverfront Stadium and Broad Street Station.

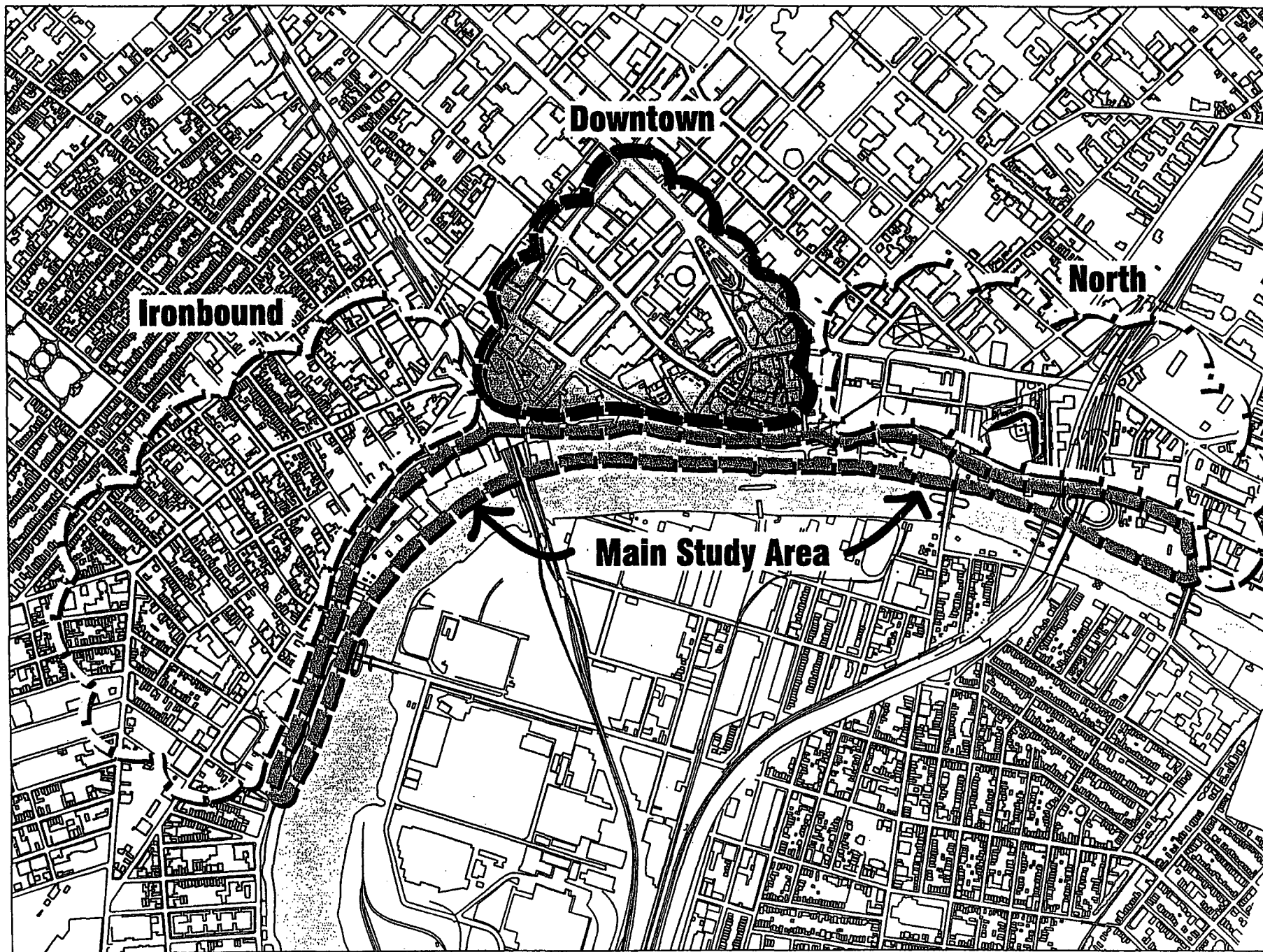
Ironbound

As evident by its name, the Ironbound is an area once known for its factories and the presence of elevated railroads that once enclosed the neighborhood. Running along Raymond Boulevard, this is a vibrant mixed use neighborhood with a substantial immigrant population. With numerous Portuguese and Spanish stores and restaurants lining the interior neighborhood streets, it is a major lunchtime destination and tourist attraction.

During the planning process residents of the Ironbound expressed several concerns about the Passaic River Revitalization Plan. These include: large scale commercial projects should not be allowed along the river south of the existing Hartz complex. Recreation facilities for use by residents should be provided along the riverfront and the pedestrian access from the Ironbound neighborhood to the riverfront should be improved.



Grant Street, northern shoulder area

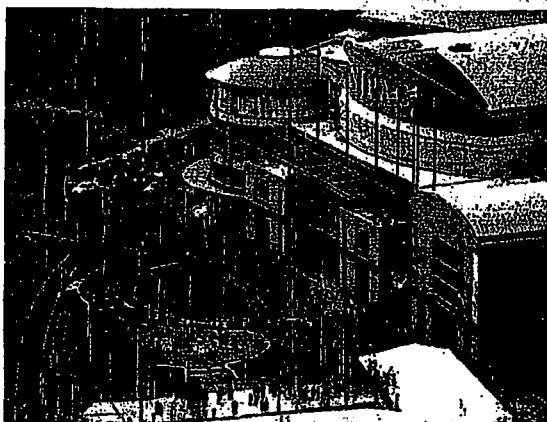


STUDY AREA - EXISTING DISTRICTS

Passaic Riverfront Revitalization



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New Jersey Performing Arts Center

"Congratulations to anyone who had anything to do with building this magnificent performing art center" was President Bill Clinton's comment during his March 1999 visit to NJPAC.

The NJPAC has proved to be a tremendous resource

for both the city and the entire state. The first structure to be built as part of NJPAC contains a 2,700 seat multipurpose hall and a 500 seat studio theater. The building stands prominently at the intersection of Center Street and Park Place overlooking Military Park and the waterfront. In this location the NJPAC is at the center of the main study area. Its architecture is accessible and inviting. The massing of the building is highly articulated, forming an assembly of separate structures in keeping with the scale of the 18th and 19th century fabric of Newark.

The design of the NJPAC with its beautiful plaza area has set a new standard for what new construction along the waterfront should look like. One goal of the Passaic River Revitalization is to extend the impact of the NJPAC down to the waterfront.

Buoyed by NJPAC's success in attracting over a million visitors since its October 1997 opening, Newark once again holds out the promise of becoming a downtown destination point for sports, entertainment, cultural enrichment, economic development and fine dining.

Riverfront Stadium

After a decade's-long absence, the Newark Bears returned triumphantly to its old home city in the new Riverfront Stadium just blocks away from NJPAC in 1999. Owner and former New York Yankee Rick Cerone welcomed Yogi Berra, Phil Rizzuto and a sell-out crowd of 6,000 fans to the Bears' opening game on July 16, 1999. The Newark Bears are part of the Atlantic League, an independent minor league with affiliated teams in Atlantic City, Somerset County and soon Lakewood and Camden. If the Riverfront Stadium is as successful as the Mercer County Waterfront Park Stadium in Trenton, it will attract 450,000 fans each season.

Riverfront Stadium is located at the north end of the main study area with its front door facing Broad Street. When the Newark-Elizabeth Rail Link is constructed, one of the light rail stops will be located in the stadium's front plaza providing easy access to both Penn Station and Broad Street Station. The outfield of Riverfront Stadium adjoins McCarter Highway but the view of the Passaic Riverfront from inside the ballpark is blocked by the stadium's ad wall.

One goal of this plan is to illustrate how the stadium can be tied into adjoining development opportunities. Having a major sports facility in the north end of the main study area might suggest that this section of the riverfront be developed with a sports theme.



Significant Projects Within Main Study Area

There are three important developments within the main study area: the Legal Center office complex; New Jersey Performing Arts Center and The Riverfront Baseball Stadium. In addition there are three major project planning and design efforts underway within the main study area which will have a pronounced impact on the character of the riverfront area: Joseph G. Minish Park, McCarter Highway reconstruction and the Newark-Elizabeth Rail Link. Following is a short description of each of these developments.

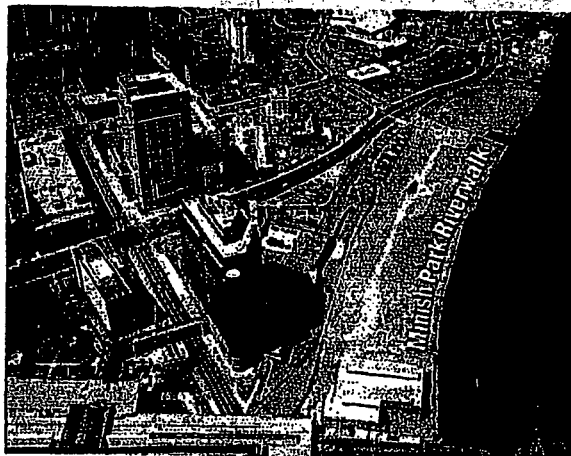
Legal Center Office Complex

In 1986 the Newark Economic Development Corporation had a plan prepared for the property located between Raymond Boulevard, McCarter Highway and The Passaic Riverfront which has come to be known as the Grad plan. This plan resulted in the construction of the 415,000 sf Legal Center, its adjoining plaza, the garage on which they sit, a pedestrian bridge over Raymond Boulevard and a service driveway on the river side of the garage. This plan proposed an extension of the garage and the upper level plaza, which would contain two additional office buildings, a hotel, and extensive retail space, all of them to be accessible from the upper level plaza only. It is important to note that the Grad plan was developed prior to any serious discussion about a riverwalk along the Passaic, the New Jersey Performing Arts Center, widening of McCarter Highway or additional property acquisition along the riverfront up to Center Street.

When the Legal Center and its garage were constructed foundations for an additional 600,000-650,000 sf office tower were installed at the corner of Raymond Boulevard and McCarter Highway. This 30,000 sf building footprint was a major investment and it provides a location where new office development could proceed very quickly.

The Legal Center's proximity to Penn Station, the Riverfront and NJPAC make it a highly attractive site for commercial development. Much has changed since the 1986 Grad Plan was prepared. Part of the charge in this planning effort is to illustrate how an expansion of the Legal Center complex can be integrated into an overall plan for the Passaic Riverfront.





Joseph G. Minish Park

The main study area of this plan coincides with the Joseph G. Minish Passaic River Waterfront and Historic Area which is being developed by the US Army Corps of Engineers. This section of the Passaic Riverfront is eroded, deteriorated and environmentally degraded due to past heavy commercial and industrial use and flooding.

In light of the renewal of the commercial downtown area of Newark near the Passaic River, the project is viewed by the Army Corps as an environmental resource to be restored.

Construction has begun on the Minish Park project, and it is divided into three phases. The first phase will provide 6,000 feet of new bulkhead extending from Jackson Street Bridge north to Bridge Street. In addition, 3,200 feet of riverbank and wetlands will be restored east of the Jackson Street Bridge. Detailed construction plans have been prepared for the Phase I bulkhead work and construction is ready to start pending final funding agreements.

Phases II and III of Minish Park, as finally envisioned by the corps, includes the development of 25 acres of park land including a 9,200-foot riverfront walkway and other park amenities such as plazas, landscaping and lighting. The goal of this plan is to illustrate how the concept of the Minish Park can be further developed and integrated with adjoining commercial and residential development and linked back to City neighborhoods.

Phase I of Minish Park for the installation of the bulkhead and river bank restoration will cost an estimated \$37.3 million. The Corps has estimated the Phases II and III park improvements at \$40.5 million bringing the total project cost to \$78.8 million.

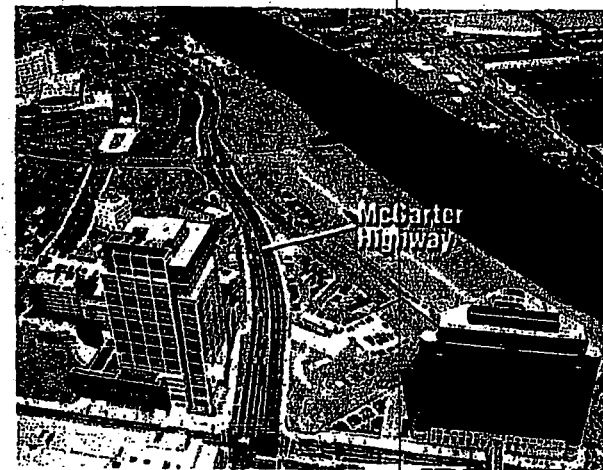
Installation of the Phase I bulkhead will require 40 foot underground tie-backs with anchors. The 40 foot wide space above the tie-backs will be reserved for a continuous walkway along the river's edge. At the foot of Center Street the Corps will construct a triangular indentation in the bulkhead which can be used for boating and/or entertainment activity.

McCarter Highway/Boulevard

The New Jersey Department of Transportation (NJDOT) is planning to reconstruct the section of McCarter Highway (Route 21) between Raymond Boulevard and I-280. The objective of NJDOT is to provide 3 lanes for moving traffic in both directions plus provide such turning lanes as might be required to optimize traffic flow.

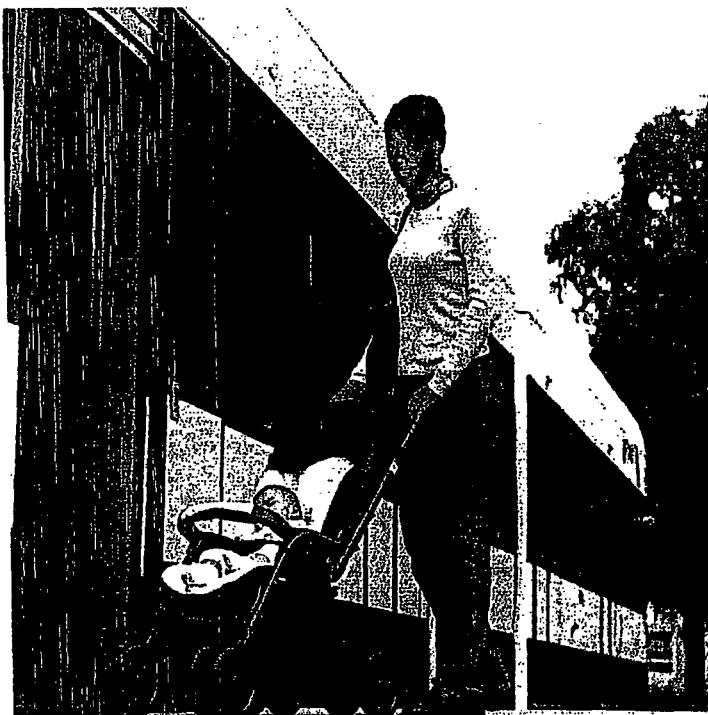
The pure traffic engineering approach is to eliminate as many low-volume intersections from McCarter Highway as possible. The CCH/EE&K team strongly suggests that McCarter should be designed as a beautiful city boulevard rather than a highway. The goal is to link the river front back to the city neighborhoods and to accomplish that objective city streets must cross McCarter Boulevard to provide access.

During this planning process NJDOT has agreed to provide a 4-way, at-grade signalized intersection at Center Street to provide access from in front of NJPAC to the riverfront. The design team feels strongly that additional at-grade intersections should be provided at Rector, Fulton and Lombardy Streets. If



intersections are not provided at these points, the open space along the river will be of little value to city residents.

Pratt Street which runs parallel to Baltimore's highly successful Inner Harbor development is a good model to use when thinking about the redesign of McCarter Highway. Pratt Street is a high volume state route with 6 traffic lanes but it has intersections every 800 feet. Stopping the auto traffic at each street allows people to walk from Baltimore's core business area to the attractions located on the waterfront. Baltimore's Inner Harbor would never have developed as it has without the intersections on Pratt Street. If Newark's riverfront is to develop its full potential, access from the city must be provided.



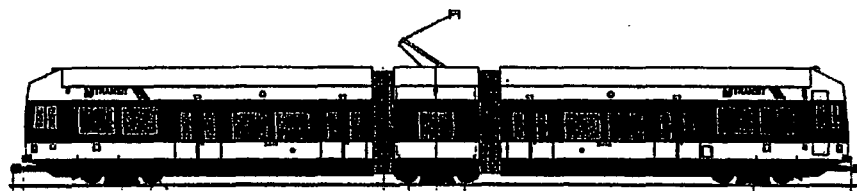
NERL Light Rail Car

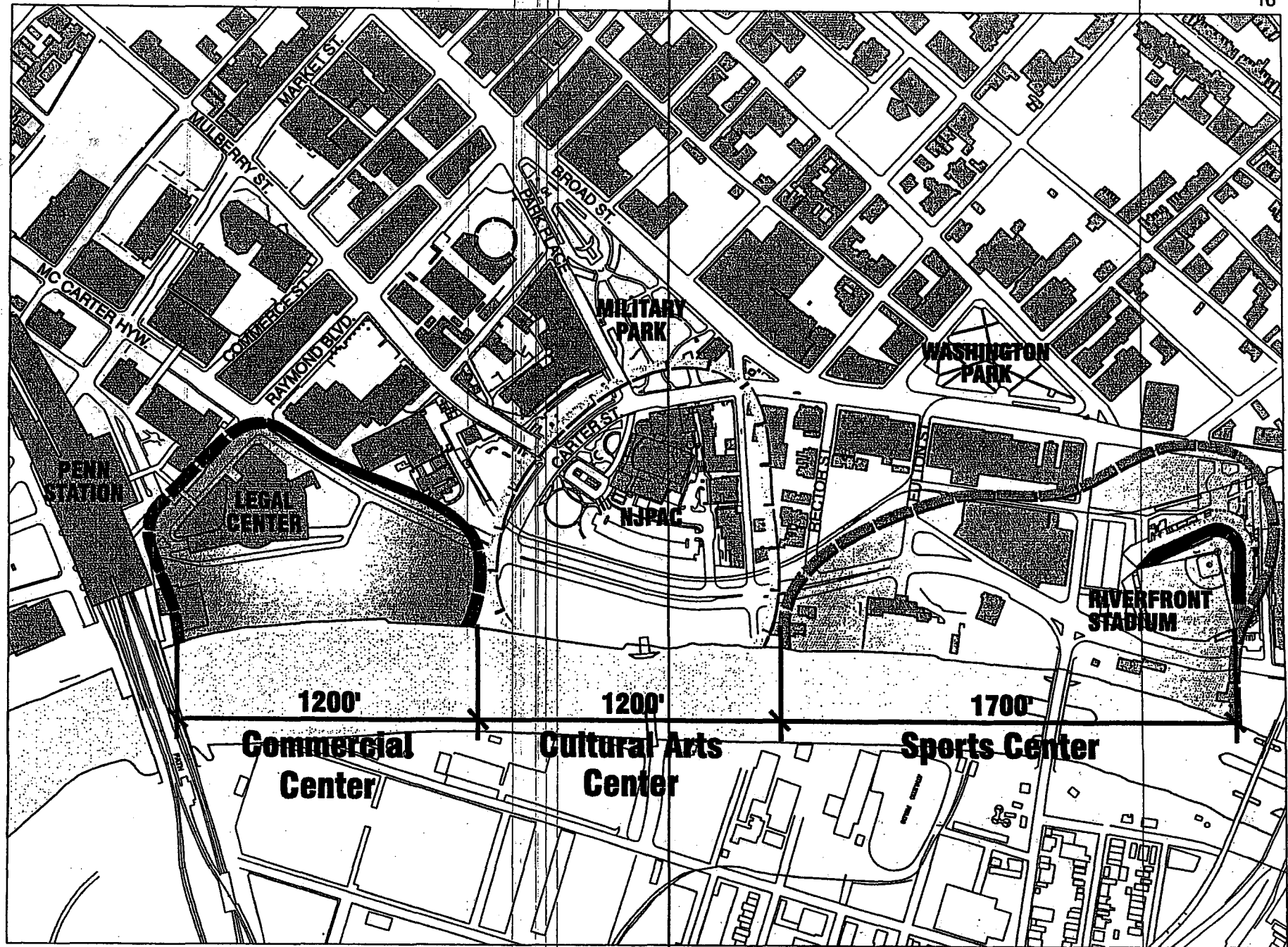
Newark-Elizabeth Rail Link

The Newark-Elizabeth Rail Line (NERL) is a proposed 8.8 mile light rail extension of the Newark City Subway linking the downtowns of Newark and Elizabeth, including a stop at Newark Airport. The first phase of this project is a one-mile section which will extend from Penn Station to the Broad Street Train Station and will cost approximately \$200 million. The NERL will connect the two train stations with the New Jersey Performing Arts Center (NJPAC) and the Riverfront Baseball Stadium. The light rail will run underground as it leaves Penn Station and come to the street surface near NJPAC. From NJPAC it will run on the surface with four stations and eleven grade crossings between Riverfront Stadium and Broad Street Station.

Connecting Newark's two regional rail stations with the NERL will spur development opportunities in downtown Newark especially along the Passaic Riverfront. It is estimated that the segment between Penn Station and Broad Street Station will carry 13,200 daily riders and reduce traffic congestion in downtown.

Part of the Passaic Riverfront Revitalization planning process has been to coordinate the design of the NERL Station to be located at the foot of Center Street between NJPAC and the widened McCarter Highway. The NERL needs to provide mass transit access to both the NJPAC and the riverfront at Center Street. It is very important to maintain the view of the NJPAC from the riverfront and to provide an attractive at-grade crossing at Center Street between the NJPAC and the riverfront.





DOWNTOWN - 3 DISTRICTS

Passaic Riverfront Revitalization



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Downtown Development Projects

There are two other development projects underway in downtown Newark which will have a significant impact on the city's character. The New Newark Foundation, a non-profit development organization, is proposing to redevelop the arena between Military Park and the University District and a new multi-use NBA basketball arena, seating 18,000, is planned for the corner of Market and Mulberry Streets. Revitalization of the riverfront, New Newark and the arena all support one another. Each project responds to a separate real estate market demand.

New Newark

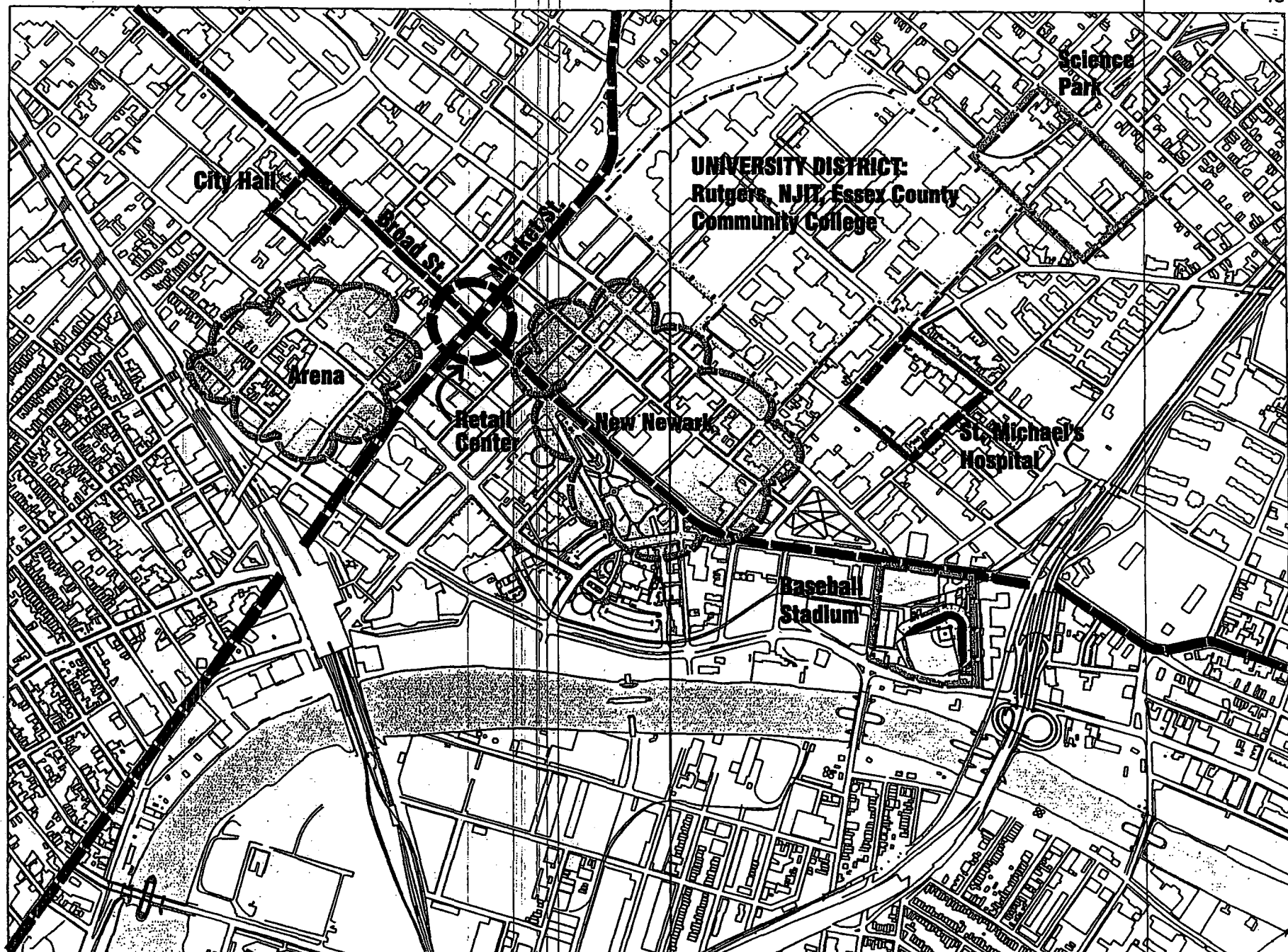
Development activity of this plan is concentrated on the multi-block area bounded by Washington Street, Central Avenue, Military Park and Raymond Boulevard. This will once again become a market-driven mixed use center for the downtown characterized by :

- Street-oriented ground-floor retail, food and beverage, and entertainment activities
- An additional blend of cultural, educational and artistic uses
- Upper floors occupied by residential, institutional, and commercial uses
- Conveniently located, attractive, accessible parking
- A completed development containing close to two million square feet of new and rehabilitated space

Broad Street will re-emerge as the number one address and most important street in the city. It will become the front door for a variety of uses including retail, cultural, entertainment, educational and commercial. The Hahnes/Kislak block will retain its historic façade and house an exciting mix of cultural, artistic, retail and commercial uses. Broad Street will link major sports complexes on the North and South as well as provide a significant retail address. In addition, it provides access to a variety of streets that lead to the revitalized riverfront.



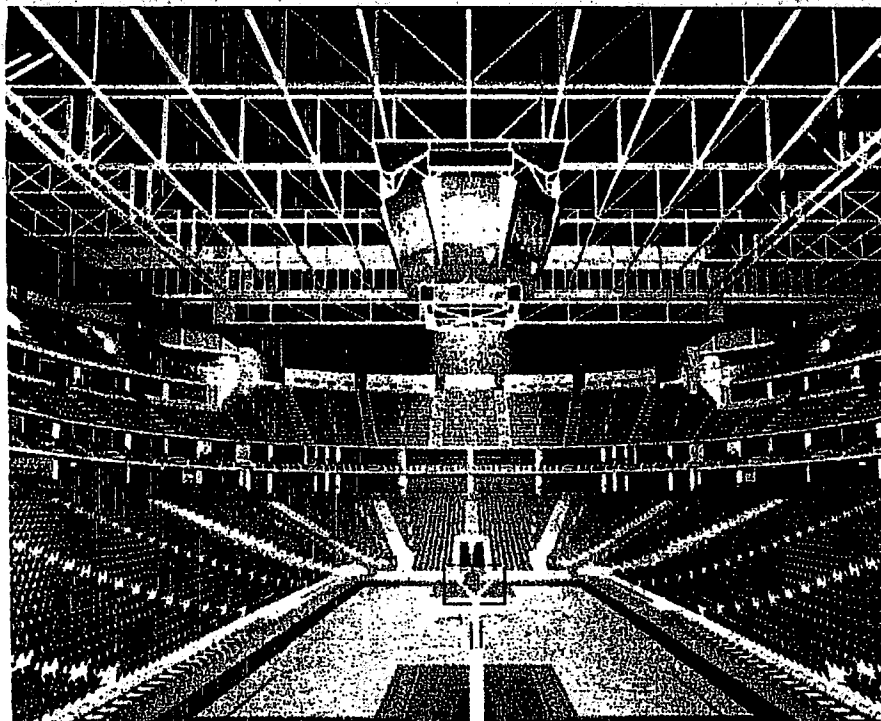
View over Military Park toward Passaic River



RELATED DOWNTOWN DEVELOPMENTS

Passaic Riverfront Revitalization

Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn



Proposed NBA arena interior

The goals of this effort are as follows:

- Re-establish Military Park as Newark's town square.
- Emphasize Broad Street as Newark's main street.
- Provide more convenient travel patterns for pedestrians and vehicles.
- Remember the past by preserving the Hahnes/Kislak block and retaining a low-scale Halsey Street.
- Merge and mix key elements of the city – educational, retail, residential and cultural.
- Build on the success of NJPAC and reach out to the future of the riverfront, Broad Street Station, the stadium and the arena.

Arena

The Newark Sports and Entertainment LLC plans to build a state-of-the-art NBA arena to be the new home of the New Jersey Nets at the corner of Market and Mulberry Streets. The Nets Arena is part of a comprehensive redevelopment plan of 40 acres which will include a multi-purpose 25,000 seat outdoor soccer stadium, mixed use commercial, retail and residential establishments that include a hotel, television studio and an array of restaurants and office buildings.

The Arena Redevelopment Plan is designed to restore the activity and significance of Market Street as a principal downtown street. The plan aims at influencing existing investments and historic buildings as well as new initiatives and structures yet to come. Placing the Arena's front door at the intersection of Market and Mulberry Streets sends a strong message that Market Street is ready to reassume its prominent place as the retail soul of the downtown.

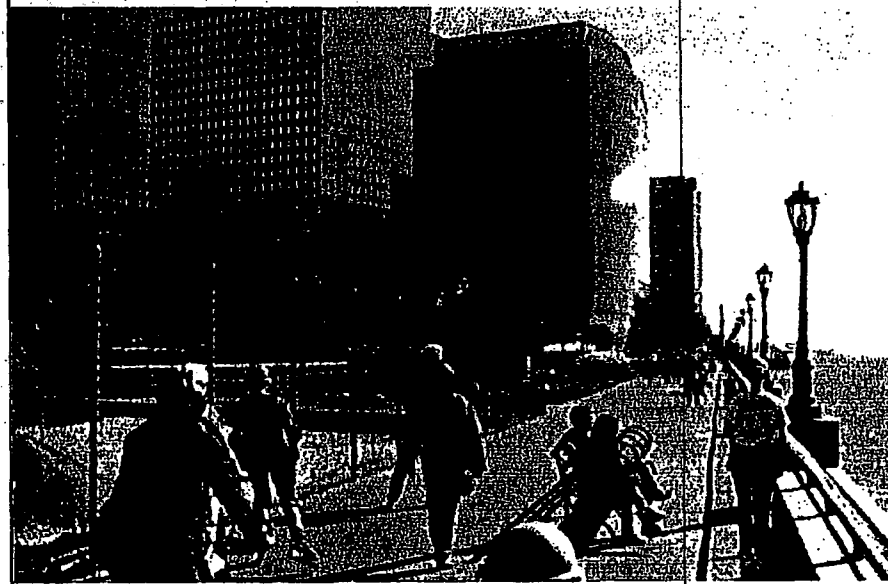
Design Principles

- Make the **Passaic River** a grand amenity for Newark's residents and visitors by providing continuous public access along the river's edge and connecting a series of parks and streets along its length.
- Establish a **water plan** of activities to take place on the Passaic River to bring life to the waterway and include recreational and entertainment uses including pleasure and diner boating, marinas, crew racing, river festivals and water taxi service.
- Where possible, **extend the city streets** to connect with the public accessway along the river's edge.
- **Concentrate the highest density** of development around Pennsylvania Station and the Legal Center.
- **Extend the street grid of the Ironbound neighborhood** to the river's edge and maintain the low rise scale of the Ironbound.

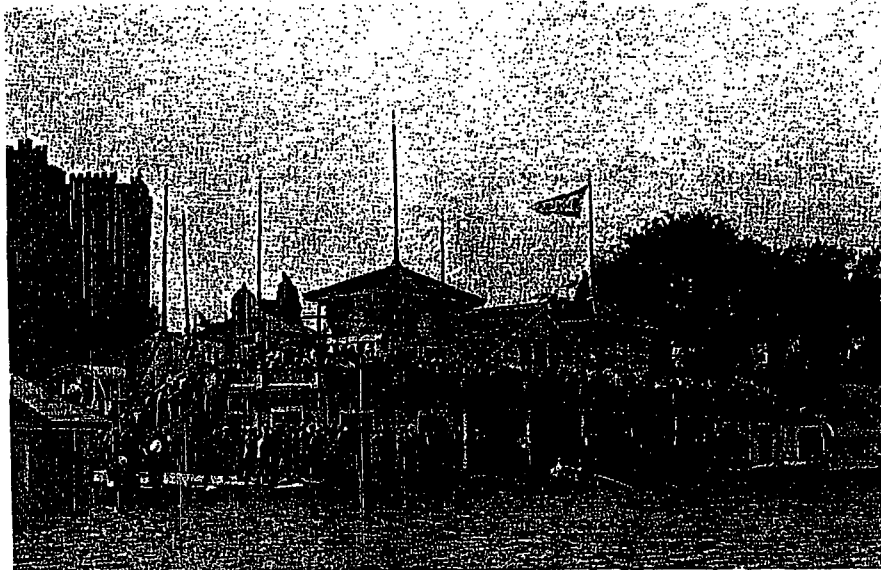


Battery City Park Esplanade, New York, NY

- Expand the influence of the **New Jersey Performing Arts Center** by extending its generous front plaza out to the water's edge to establish the city's front door on the river.
- Reconstruct **McCarter Highway (Route 21)** as a boulevard with regular intersections (at least 600 to 800 feet apart), to encourage access to the river's edge.
- Redevelop **Raymond Boulevard** as a major gateway to the City by encouraging residential, commercial and open space developments.
- As the industrial properties along the riverfront in the eastern and northern shoulders come up for redevelopment, require the construction of the public accessway along the water's edge which will eventually create a **continuous river corridor open space system**.



Battery City Park, New York, NY



Former Branch Brook Park Boathouse



Boat Houses on Schuylkill River, Philadelphia, PA

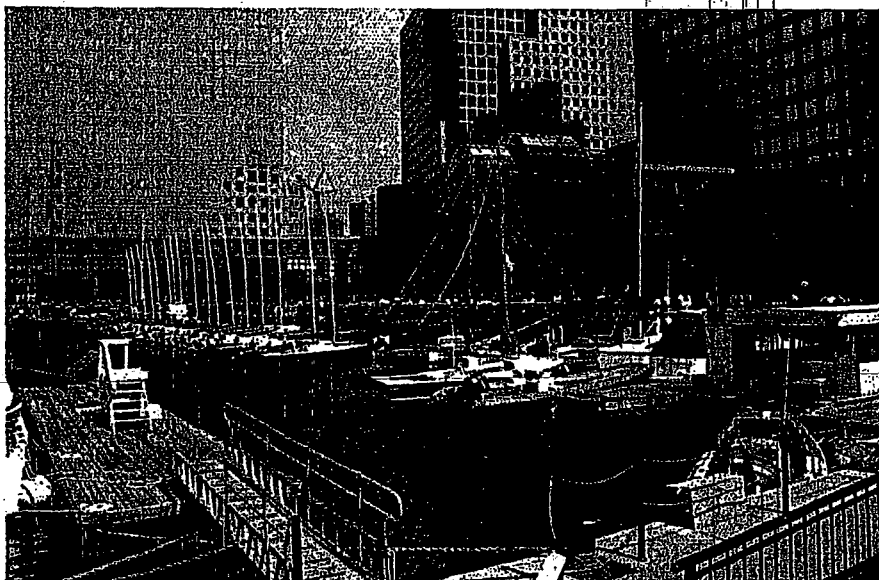
Options

After having completed the analysis phase and establishing the design principles, the design team explored various ways the plan might be carried out. The investigation of options was concentrated on the section of the main study area between Penn Station and NJPAC. This is the section of the riverfront that has the most potential for mixed use commercial development and it is the location where new development can have a dramatic visual impact on the riverfront.

The program adopted for the key development area included construction on the existing 30,000 sf office building foundation pad, a 350 room hotel, and two additional office structures of 220,000-300,000 sf each. In addition the program called for ground floor retail, restaurant and service operations to provide a vibrant street life to the project. The client group emphasized the need to integrate water activities such as marina, dinner boats and floating restaurants into the plan for the riverwalk.

During the planning process, a proposal was made by one of the members of the Passaic Riverfront Working Group that a very wide pedestrian bridge be constructed over McCarter Highway just north of Center Street to provide access between the NJPAC and the riverfront. This bridge would be several hundred feet wide and be landscaped. After investigating this concept, the design team concluded that a pedestrian overpass above McCarter Highway would not be a good idea. In order to be high enough for trucks to pass under the bridge, the structure would cut off the view between the NJPAC and the waterfront. The space under such a wide bridge would be dark and foreboding. The millions needed to construct such an overpass would be much better spent on landscaping and public amenities along the riverwalk. Experience in other cities across the county shows that this type of pedestrian bridge is rarely successful.

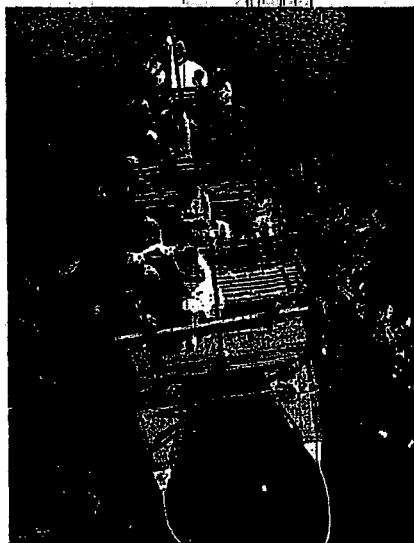
Several design alternatives for the key development area were presented to the client group for review and discussion. After each presentation, revisions and refinements were made to the proposal. The final plan presented here represents the collaboration of the design team, client group, and other interested parties.



Marina at World Trade Center, New York, NY



Sculling



Swan Boat

Master Plan

A continuous public riverwalk and park will be created along the west bank of the Passaic from Bridge to Brill Street. In time, this riverfront open space will be extended east to the Route 1 and 9 bridge and north to the city line. Revitalization of the river's edge in Newark as a public amenity is seen as the first step in creating a Passaic River state park system which will extend all the way from Newark to Paterson.

At its most narrow point, the riverwalk will be 60 feet wide which will allow adequate room for walking, jogging, and bicycles in addition to seating areas. The riverwalk park will expand in width to several hundred feet in some sections to create a softer, more natural edge to the river. Existing parks along the Passaic such as Riverbank Park will be connected into the larger open space system. An overriding concern in the plan is providing pedestrian connections between the riverwalk park and adjoining city neighborhoods such as the Ironbound, Lower Roseville and North Broadway. A key to connecting the Riverfront to the city is to create at-grade intersections on both McCarter Highway and Raymond Boulevard which will slow traffic speed and allow pedestrian access to the open space. All parts of this proposal have been development in conformity with the New Jersey Department of Environmental Protection Coastal Zone Management and Waterfront Development Regulations.

Water Plan

The key to making the Passaic Riverfront an exciting place to attract residents and visitors is to create activity of all types on the water. Now the river is devoid of any type of recreational boat activity. Given the river's width, slow current, adequate depth and connection to New York Harbor, it has a great untapped potential to support recreational boating. The plan indicates locations for small boat marinas, rowing club boat houses, kayak centers, and public dock facilities.

More commercial uses of the river should also be encouraged. Locations for dinner boats, floating restaurants and bars, excursion boats and water taxi service to Jersey City and New York are provided.



CONCEPT MASTER PLAN

Passaic Riverfront Revitalization



Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn

The riverfront needs to be a focus for city wide festivals and celebrations. An amphitheater is proposed at the foot of Center Street next to NJPAC. The concept is that the NJPAC would extend its entertainment program down to the river's edge. In fact the stage of the amphitheater might be a floating facility to be used in summer months and then relocated for the winter. Implementing festivals, celebrations and entertainment events along the riverfront will take a sizable management effort but the rewards to the city will be great.

There are some restrictions on boat traffic on the Newark section of the Passaic River. The clear height under the Jackson Street Bridge at mean high water is 10 feet. Jackson Street is a pivot bridge and it will open on demand for tall boats but it takes 5-10 minutes to rotate the span. While the bridges create an obstacle to larger boats, most recreation boats will be able to pass under the Newark bridges without restrictions.

The navigation channel in the Passaic River at Newark is 300 feet wide. This channel width was necessary when the river carried much industrial boat traffic. To encourage recreational and commercial boat activity docks and marinas are needed along the river's edge which will extend beyond the navigation channel line. The regulated width of the channel should be reduced by the US Army Corps of Engineers to reflect the needs of recreational boating.

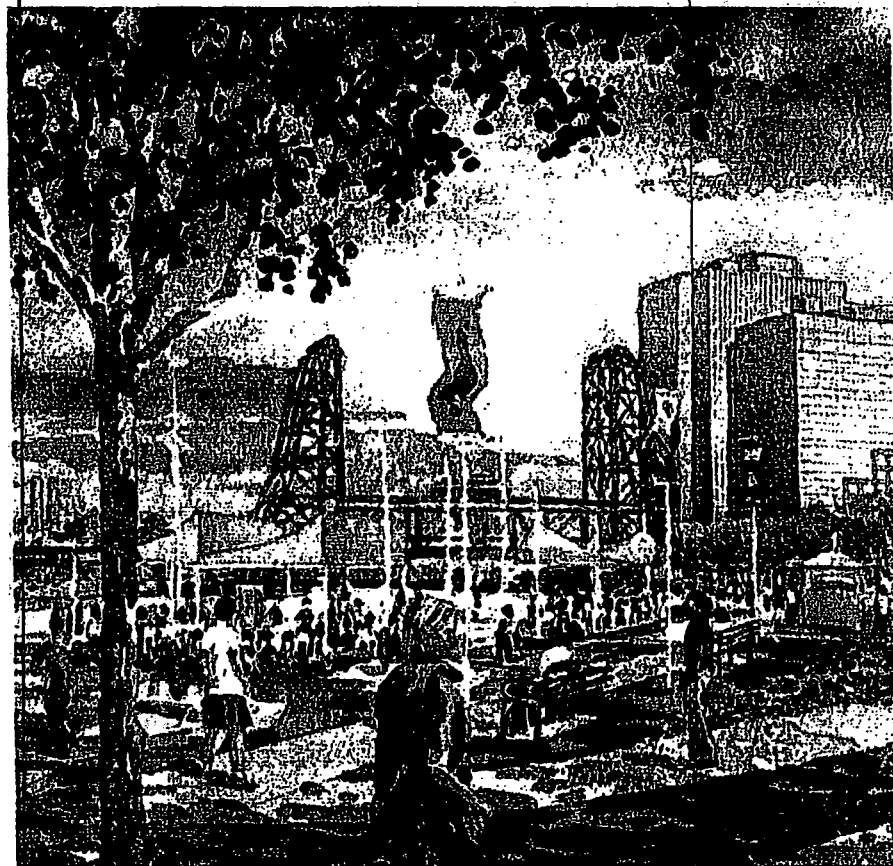
Minish Park Expanded

This plan expands the concept for Minish Park as proposed by the US Army Corps of Engineers and connects the park with adjoining city neighborhoods. The Minish Park area has been increased from 25 acres to 44 acres. As proposed in the US Army Corps plan, there will be a continuous walkway along the river's edge but rather than 40 feet wide it will be a minimum of 60 feet wide. The increase in the riverwalk width will allow for separate paths for walking and bicycling in addition to linear planting areas.

In some locations, such as north of Center Street in front of the New Jersey Performing Arts Center, the park area will expand to be 200 feet wide. The

goal is to make the river's edge an active recreation and entertainment area. Facilities, which might be located within the riverfront park area, include:

- Amphitheater associated with NJPAC for outdoor music and drama productions
- Boathouses and practice rowing facilities to support rowing and kayaking on the river
- Unique restaurant and concession stands
- Sculpture and monuments related to Newark's history
- Relocate Founder's Park commemorating Robert Treat's landing in 1666



View of proposed riverwalk



Exampe of park along a riverfront

When Branch Brook Park was developed by the Essex County Park Commission at the turn of the last century, the landscape design was provided by the Olmsted Brothers. The riverfront park will require an equal level of design talent. Being one of the city main points of entry, the proposed riverfront park must be an example of the best park design of our time. Large mature trees and well placed grass areas should give the riverfront a lush natural quality. Lighting should provide both a sence of charm and safety. Paving, handrails, benches and other landscape features must be objects of great beauty.

Key Development Area

The plan illustrates how the vacant property between Penn Station, the Legal Center and NJPAC can be developed with a vibrant mixed use development which will energize this key section of the riverfront.

The objective is to create a development that has the character of the World Financial Center in Battery Park City or Rockefeller Center on the Passaic Riverfront.

In this plan the concept of Minish Park has been expanded to be a linear park along the river's edge with a minimum width of 60 feet. To unite the riverfront park with the city, Center Street is required to be extended from NJPAC to run parallel to the river and connect to an extension of Raymond Plaza west which runs in front of Penn Station. The extension of Center Street will provide both vehicular and pedestrian access to the river's edge and the proposed new commercial development.

In turn Center Street, the NJPAC plaza space and Military Park will be the link to the New Newark development and the university district with the waterfront.

Development Components

- **Three new office buildings** totaling 1,070,000 sf and a new 350 room hotel are arranged round a public area which will connect to the riverwalk.
- **An active street life environment** will be created by providing space for restaurants, shops and services at the base of the new office and hotel structures.
- **The new buildings are arranged by height**, with taller structures in back, so that all tenants will have a view of the river.
- **To expand the impact of the New Jersey Performing Arts Center** down to the riverfront, an amphitheater is located at the foot of Center Street.
- **Promoting activities on the water** is a critical part of this project. The plan shows dock access points for dinner boats, several floating restaurants and/or night clubs, and a floating stage for the amphitheater.

The plaza space in front of NJPAC is extended to the riverfront and three vacant sites around the NJPAC would be developed with a combination of office, housing and retail uses.

Mass transit access will be provided to the waterfront via a stop on the light rail system located at Center Street and McCarter Highway and adjoining the NJPAC.

McCarter Highway will be reconstructed to be an elegant city boulevard with at grade intersections to promote access between the downtown core and the waterfront. Great care will be devoted to the lighting and landscaping of this new boulevard.



Rendering of development area

Ironbound

For the Ironbound to enjoy the benefits of Minish Park the neighborhood streets including Prospect, Congress, Jefferson, Madison and Monroe must be extended across Market Street and Raymond Boulevard to the edge of the riverfront park.

Creating more at-grade intersections along Raymond Boulevard will slow traffic down and promote a more pedestrian friendly environment. Extension of Ironbound neighborhood streets will create five potential development sites between the riverfront park and the existing neighborhood. These sites should be developed with low-scale, market rate housing similar to that found within the Ironbound neighborhood.

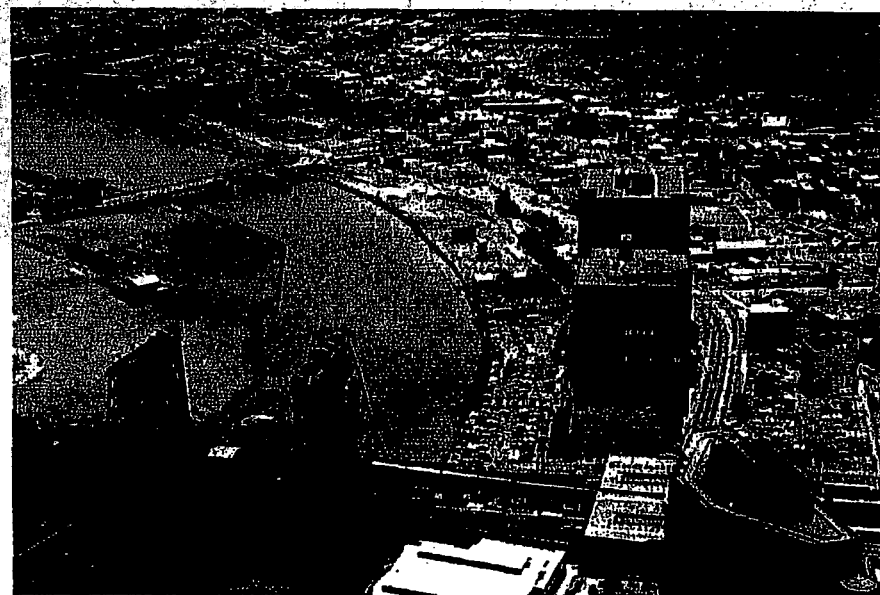
North of Center Street

From Center Street and the proposed amphitheater north to the I-280 bridge, the park space between McCarter highway and the river will have a softer, more natural quality. This is an ideal location for walking and bike paths with a beautiful landscape. Paths will connect to the Riverfront Baseball Stadium giving fans a chance to enjoy the river's edge before and after a game.

The 3,200 feet of unobstructed river between Penn Station and Bridge Street is a perfect spot for a sprint rowing course. Much interest has been expressed by local rowing associations in having several boat houses constructed along the riverfront to facilitate both competition and recreational rowing. This type of unique sports activity would draw support from the five downtown colleges, Newark High Schools and office workers who were exposed to the sport in their college days.

South of Penn Station

The 60 foot wide riverwalk will extend south under the Amtrak railroad bridge and be integrated with an expansion of the Hartz Mountain Industries office complex which is home to NJ Transit and Blue Cross/Blue Shield. To allow for the expansion of the office complex, the proposal is to locate half the width of the riverwalk on a floating platform which will also serve as access to a small boat marina.



View south of Penn Station

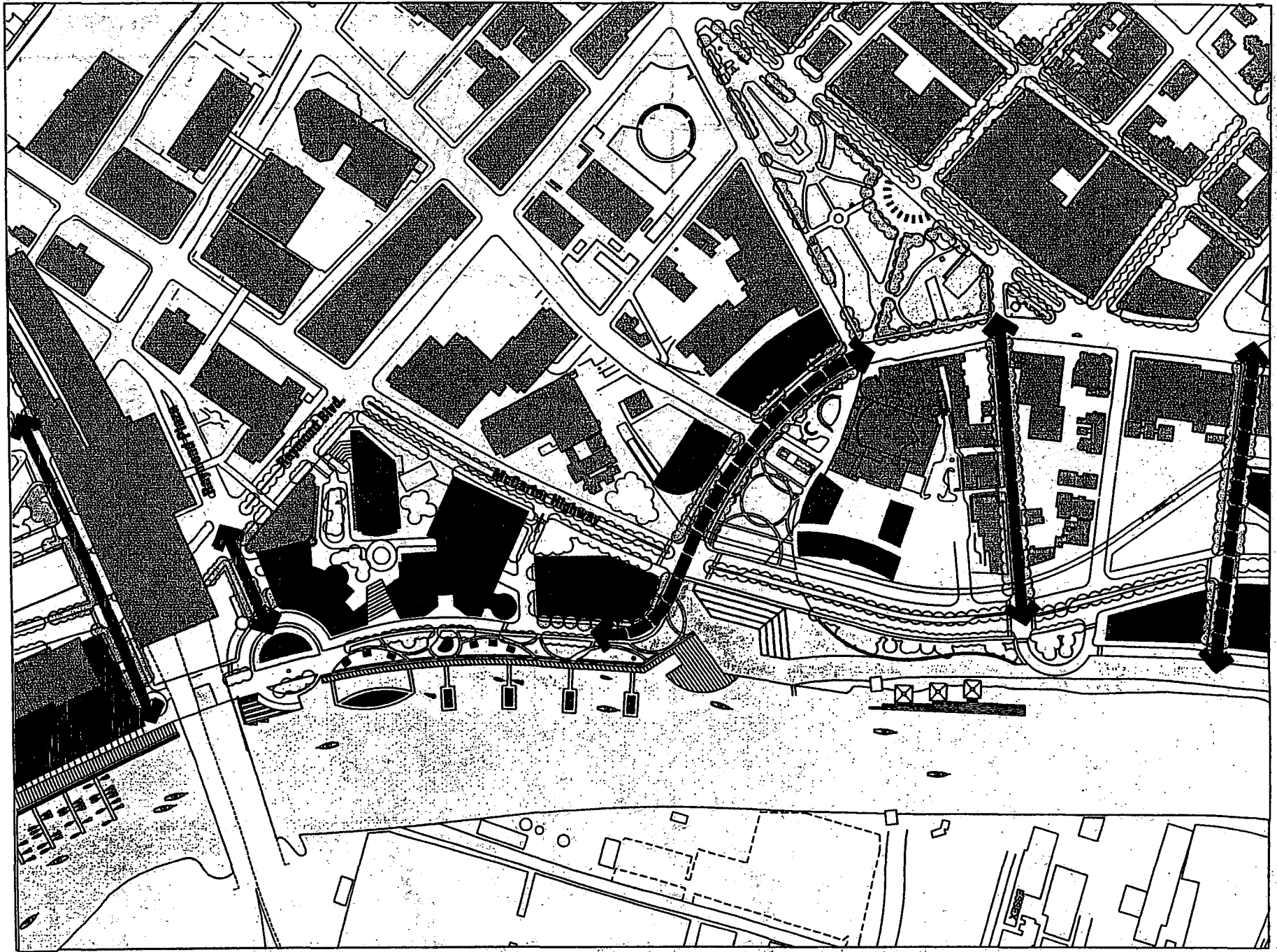


IRONBOUND WATERFRONT - UPLAND CONNECTIONS

Passaic Riverfront Revitalization

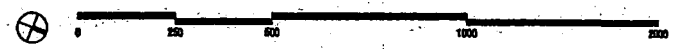


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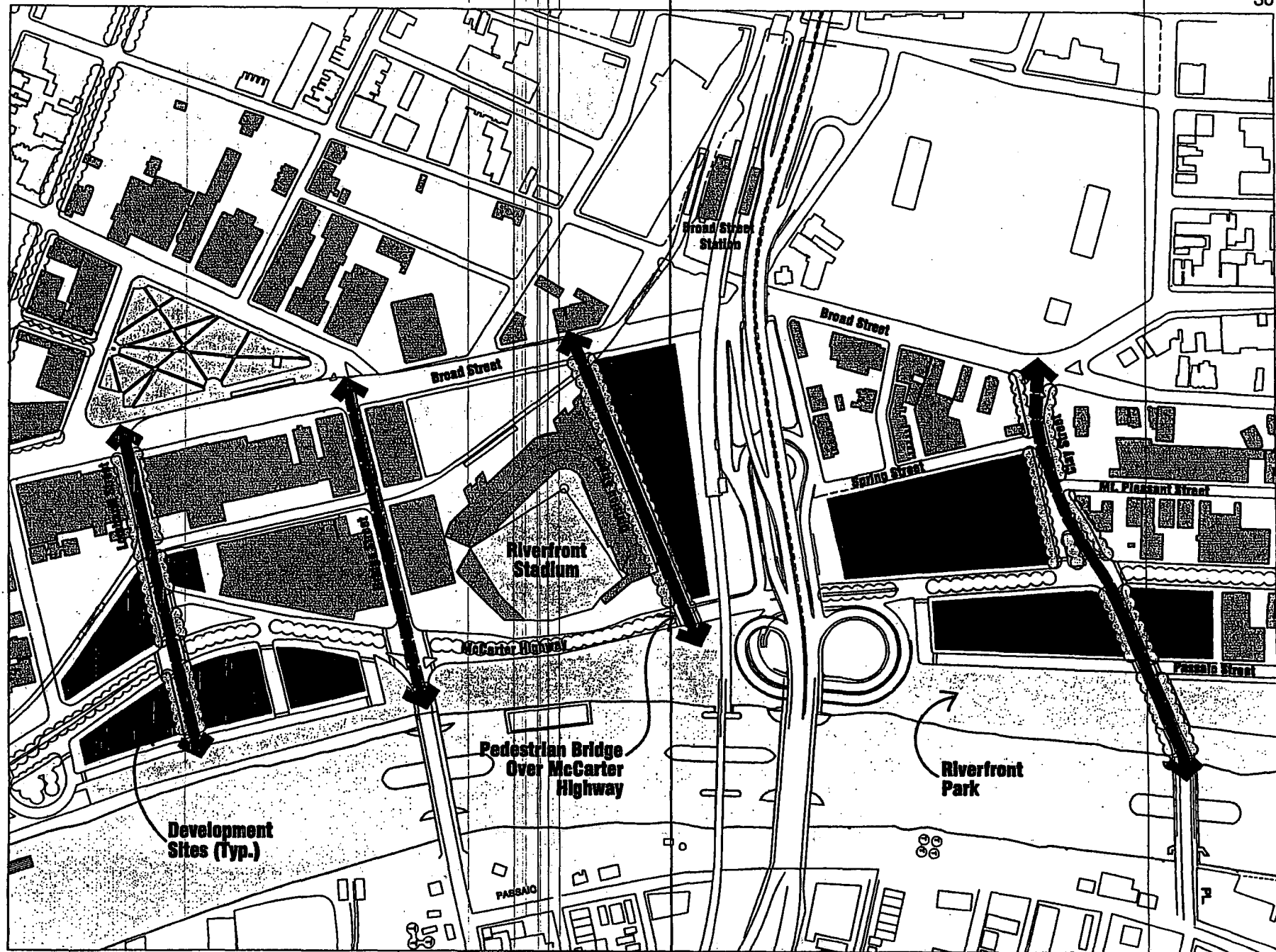


DOWNTOWN - UPLAND CONNECTIONS

Passaic Riverfront Revitalization



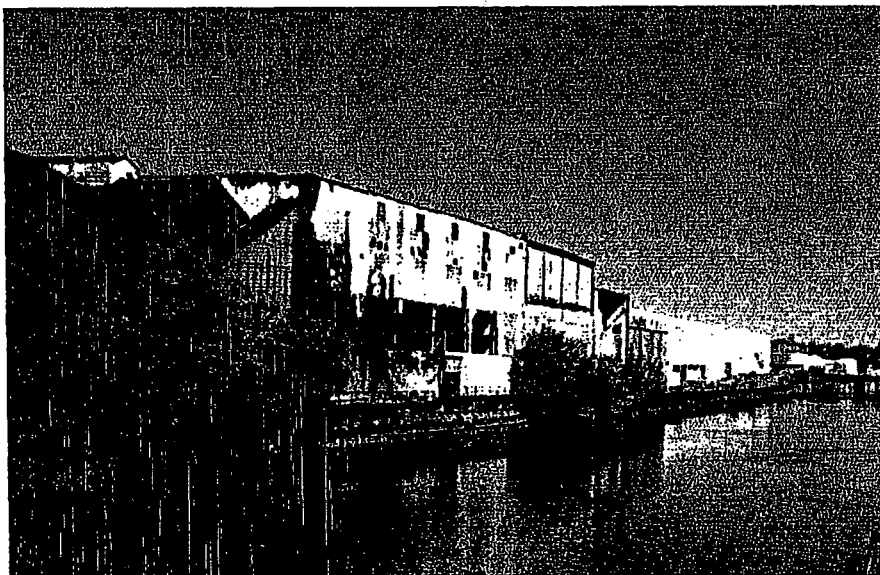
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NORTH WATERFRONT - UPLAND CONNECTIONS

Passaic Riverfront Revitalization

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View north of Clay St. Bridge



Second River on edge of Branch Brook Park

Northern Shoulder

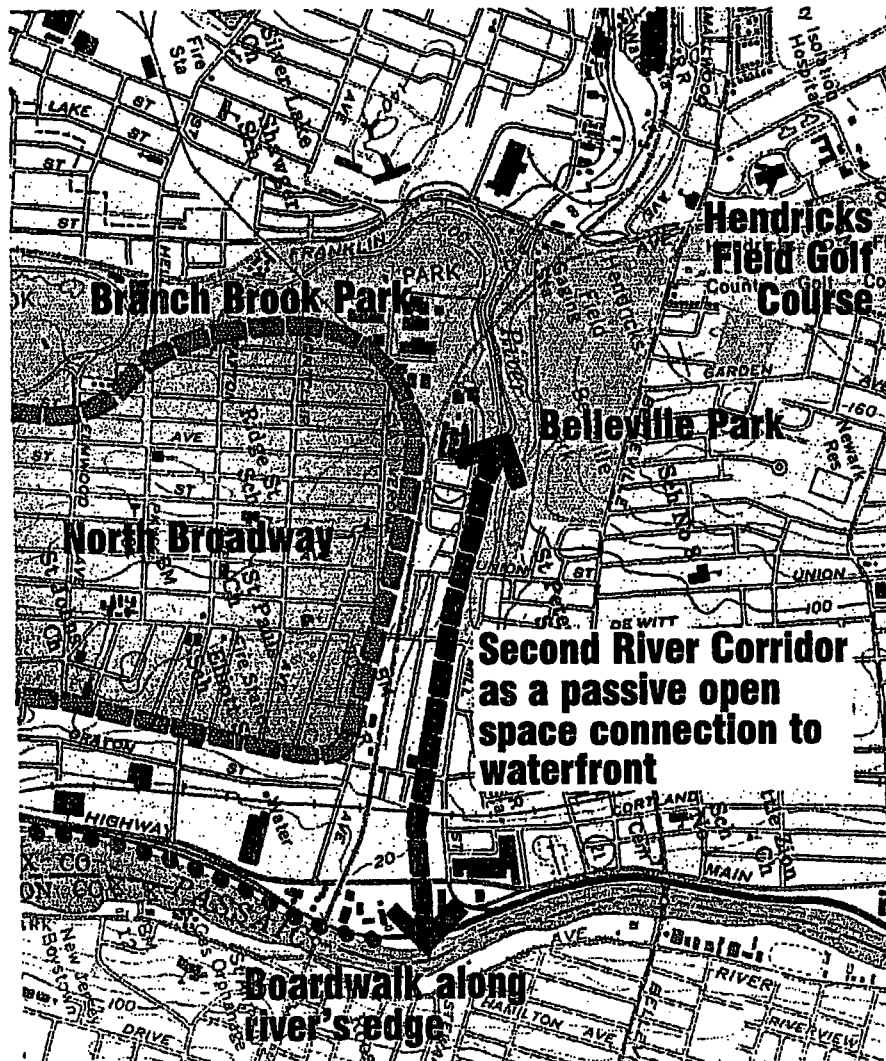
In the area between Interstate 280 and the city boundary with Belleville, there are two significant neighborhoods adjoining the McCarter Highway: Lower Broadway and North Broadway. The historic Mount Pleasant Cemetery, with its grand gothic gates facing Broadway, is located between these two neighborhoods. To the west, the Lower Broadway and North Broadway neighborhoods have access to the city's largest open space, Branch Brook Park.

Unfortunately, these neighborhoods have no access to the Passaic Riverfront on the east. At the point where the McCarter Highway passes by the Mount Pleasant Cemetery, the road becomes an elevated, limited access highway, making pedestrian movement between the inland city neighborhoods and the riverfront very difficult, if not impossible.

In addition to the limitations created by McCarter Highway, access to the Passaic Riverfront from the neighborhoods is restricted further as the residential streets that run towards the river are truncated by industrial sites clustered at the waters edge. Despite their location, these facilities do not rely on waterfront access for their operations. Those that are still in operation inhabit obsolete structures. It is anticipated that the remaining viable uses will eventually relocate to modern facilities outside of this area. As these industrial lands are forsaken by their present occupants, the land should be developed as open space and the residential uses within the neighborhoods should be extended to the open space along the waterfront. Existing City owned property located along the riverfront, such as the 2 acre parcel at the north end of Riverside Avenue, should be held for open space development.

The area between I-280 ramp, McCarter Highway, 3rd Avenue and the river is ready for a comprehensive redevelopment. The streets which run perpendicular to the river including Clay, Clark, Governor, 3rd and 4th Avenues should be pedestrian and vehicular links between the existing residential neighborhood and new mixed use development on the edge of the river. It is very important that the traffic signals be maintained on McCarter Highway as to limit the speed of thru traffic and provide access to the riverfront.

The Passaic Riverfront is a major open space amenity serving all municipalities which adjoin it. Despite the severe constraints that limit Riverfront access



North Shoulder - Second River as open space link

from the Lower Broadway and North Broadway neighborhoods, opportunities exist for the establishment of open space connections between these neighborhoods and the waterfront.

While Lower Broadway and North Broadway do not have access to the waterfront, both neighborhoods have extensive access to Branch Brook Park, to the west, and limited access to Mount Pleasant Cemetery. Additionally, to the north of the neighborhoods, the boundary between Newark and Belleville is marked by the Second River. This river, which was once part of the Morris Canal, runs parallel to Mill Street as it flows into the Passaic River. Branch Brook Park is located on its south banks and Belleville Park / Hendricks Field Golf Course are located on its north banks, in Belleville. Collectively, these parks comprise a significant area of existing public open space within the Northern Shoulder.

The Second River corridor is contained within a portion of Branch Brook Park known as the Extension Division. It is indicated within the Historical Profile of the Essex County Department of Parks as an intermittent strip of land of varying width that evolves out of Branch Brook Park and terminates where Broadway traverses the river. Of note is that the parkland that envelops the Second River does not reach the Passaic Riverfront, thereby leaving a pronounced gap in public access.

The Second River corridor represents a distinct opportunity to integrate the future public open space of the Passaic Riverfront with the significant Essex County open space network that exists within Newark. It also presents an opportunity to connect the neighborhoods of Lower Broadway and North Broadway to the waterfront. The Second River corridor should be extended beyond its present terminus at Broadway in order to serve as a passive open space connection between the existing parklands and the open space along the Riverfront.



View toward New York City



South of Jackson St. Bridge

Eastern Shoulder

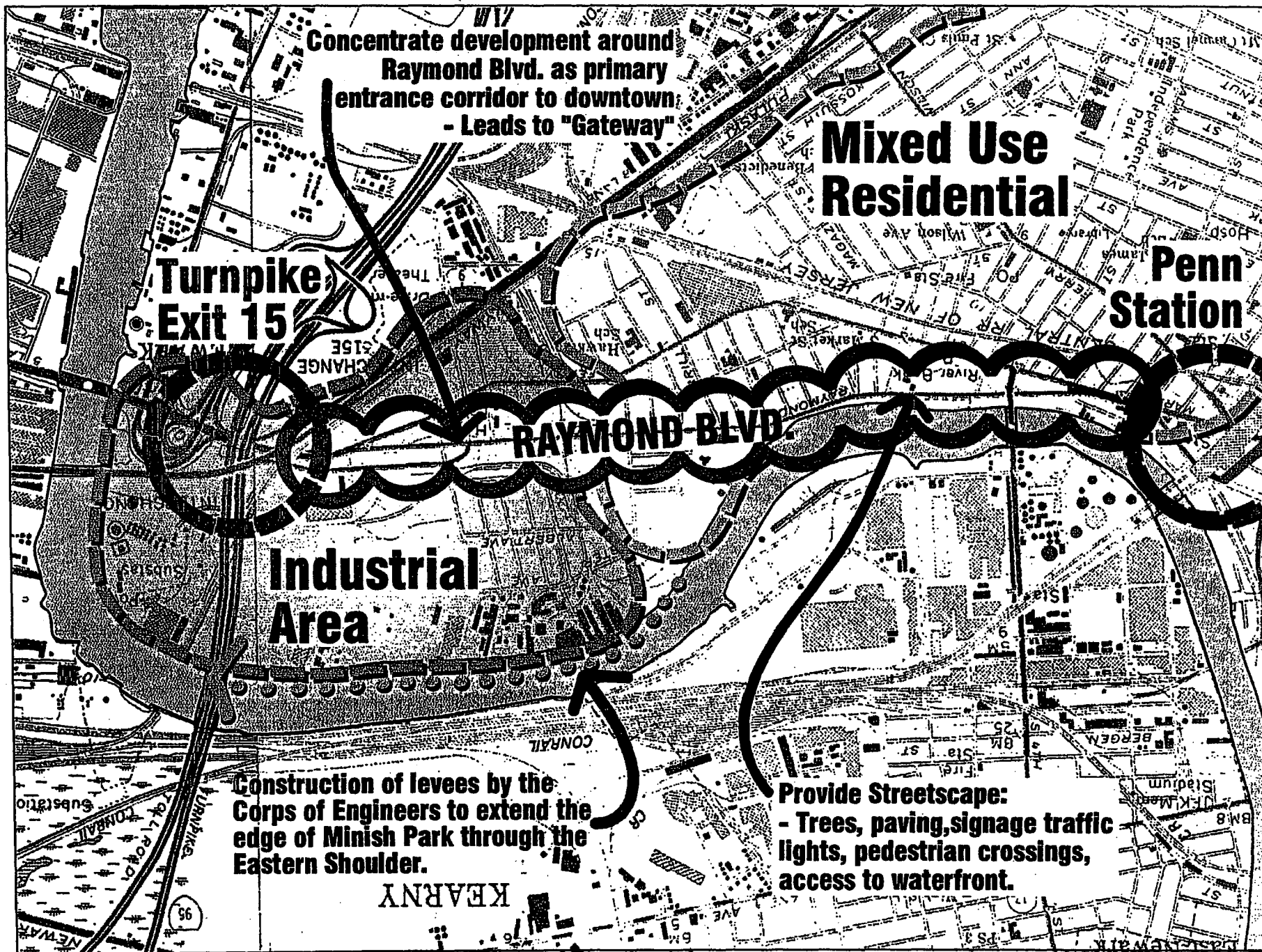
The Eastern Shoulder between Raymond Boulevard and the Passaic River is used for a wide variety of industrial and storage activities. In the center of this industrial area sits the Diamond Alkali Superfund Site. This six acre property located on Lister Avenue adjacent to the Passaic River is the subject of an intense clean-up effort on the part of Federal, State and Local environmental officials.

It is expected that the Eastern Shoulder area will remain an industrial zone providing employment opportunities for city residents. Over time the environmental problems caused by previous industrial uses will be cleaned up to a point where all property can be safely used for any land use except housing.

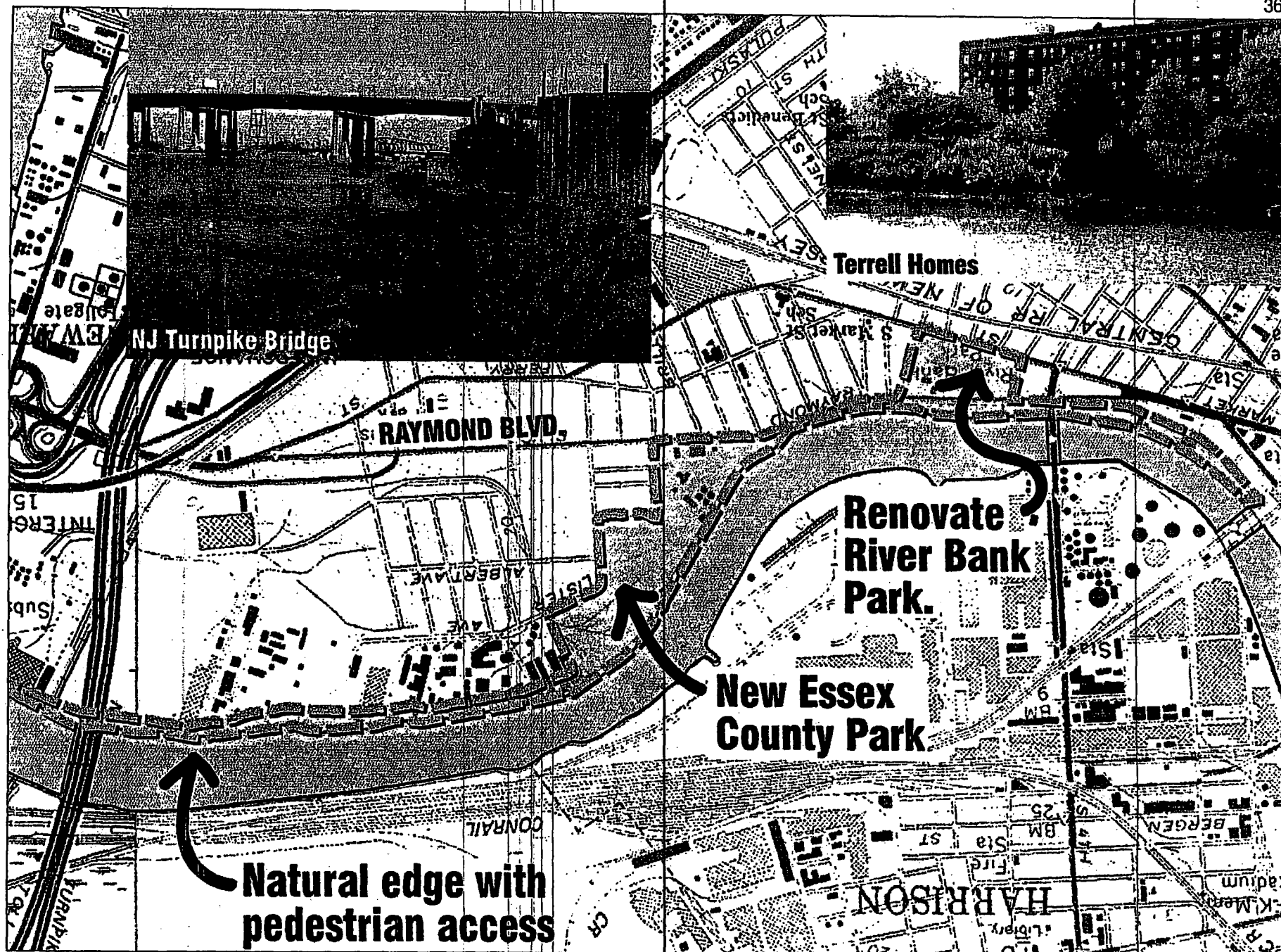
Terrell Homes is located on the edge of the Eastern Shoulder industrial area. This existing family housing development needs to have an open space buffer installed between it and the adjoining industrial uses. In addition Terrell Homes should have an open space connection to the Passaic Riverfront. The Essex County Improvement Authority has proposed construction of a major recreation area between Brill and Mott along Raymond Boulevard. This county park facility will provide a recreation area for Terrell Homes residents including ballfields, in-line skating rink and tennis courts.

As individual property owners apply for site plan development permits for property in the Eastern Shoulder area which fronts on the Passaic River, they will be required to comply with New Jersey Department of Environmental Protection Coastal Zone Management Regulations NJAC 7:7et.seq. Under these NJDEP regulations, the land within 100 feet of the edge of the river must be developed with a water-dependent use or left undeveloped. Within the 100 foot wide zone along the river's edge, the developer will be required to provide a walkway of at least 30 feet in width. Public access to the walkway must be provided.

In time a natural edge with pedestrian access buffered from industrial uses will be established along the river in the Eastern Shoulder zone. If done correctly, people using the river or walking along the public access route should be unaware of the industrial uses located in the center of the zone.



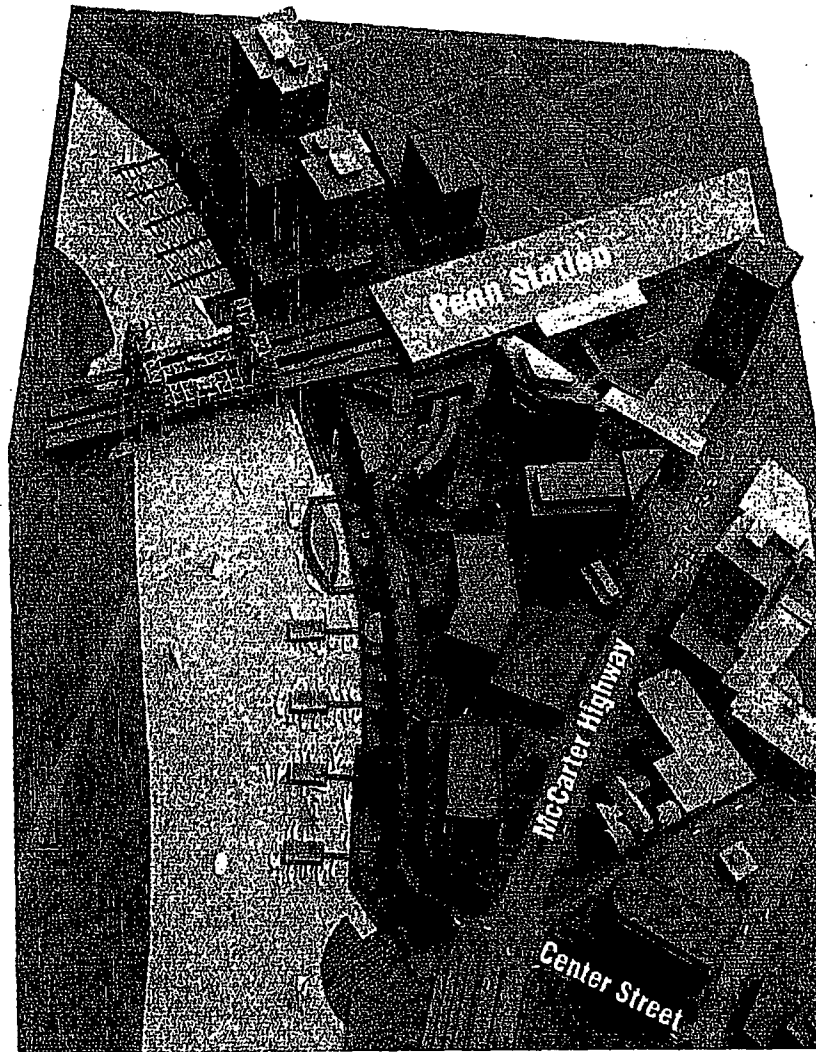
EAST SHOULDER - RAYMOND BOULEVARD AS GATEWAY



EAST SHOULDER - OPEN SPACE

Passaic Riverfront Revitalization

Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn



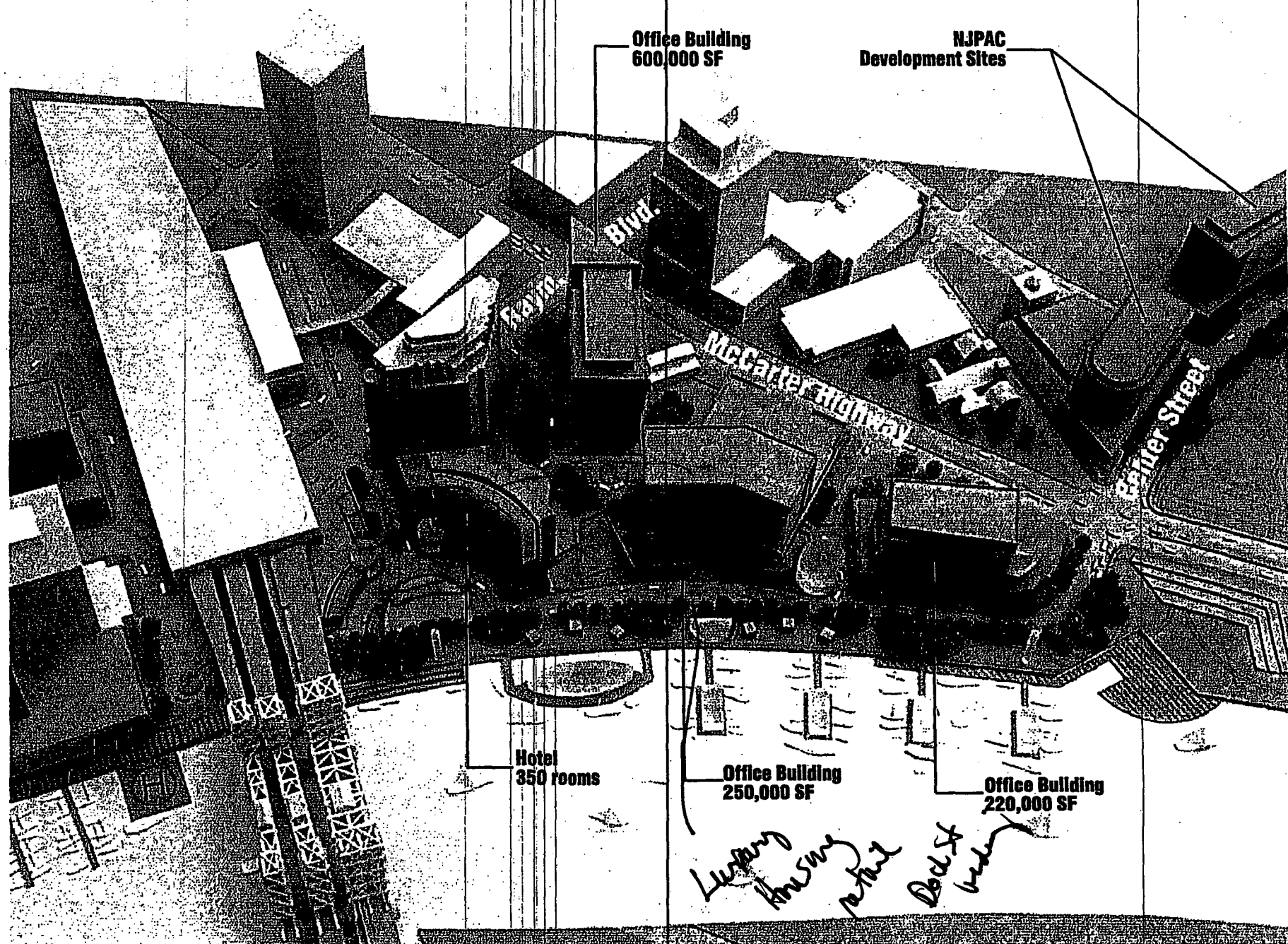
Model Photo

Prime Development Site

The availability of mass transit access through Penn Station via Amtrak, NJ Transit, NY-NJ Path, the Newark Subway and the Newark-Elizabeth Light Rail Line makes the potential development sites around the station a prime location for office and hotel uses. A 10-minute taxi ride from this location puts you at Newark International Airport, a tremendous attraction for business travelers. The Legal Center constructed in 1989 began the process of development within the 16 acre area bounded by Raymond Boulevard, McCarter Highway and the river. This plan builds on the investments made in infrastructure as part of the Legal Center Development.

The organizing principles of the prime development site are as follows:

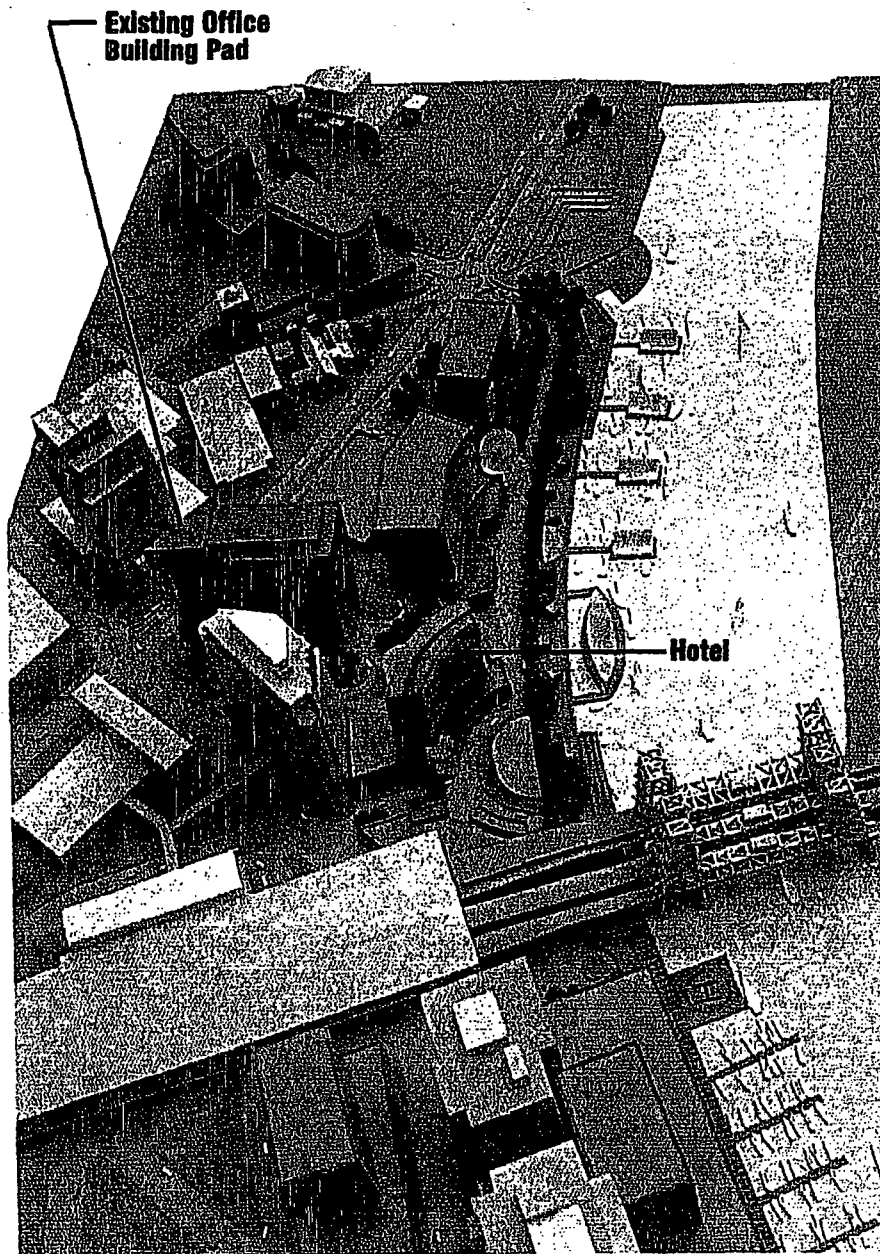
- **Extend Center Street** across McCarter Highway and parallel to the riverwalk to connect new riverfront development sites with the city.
- **Extend Raymond Plaza** east from the front of Penn Station down to the riverwalk thereby making both a visual and physical connection to the river.
- Provide a **pedestrian connection** from the existing elevated Legal Center Plaza down to the new riverwalk via a grand set of steps.
- Providing both **vehicular and pedestrian access along the river's edge** between Penn Station and NJPAC will expose this location to the greatest number of people.
- Reinforce the pedestrian activity along the riverwalk with **boating activity** on the water.
- Arrange new buildings so that all structures have a **view of the river**.
- Create a **festival of commercial activity** at the base of new structures along the riverwalk. Develop cafes, restaurants, bars, and shops which will generate street activities.



MODEL OF PRIME DEVELOPMENT AREA

Passaic Riverfront Revitalization

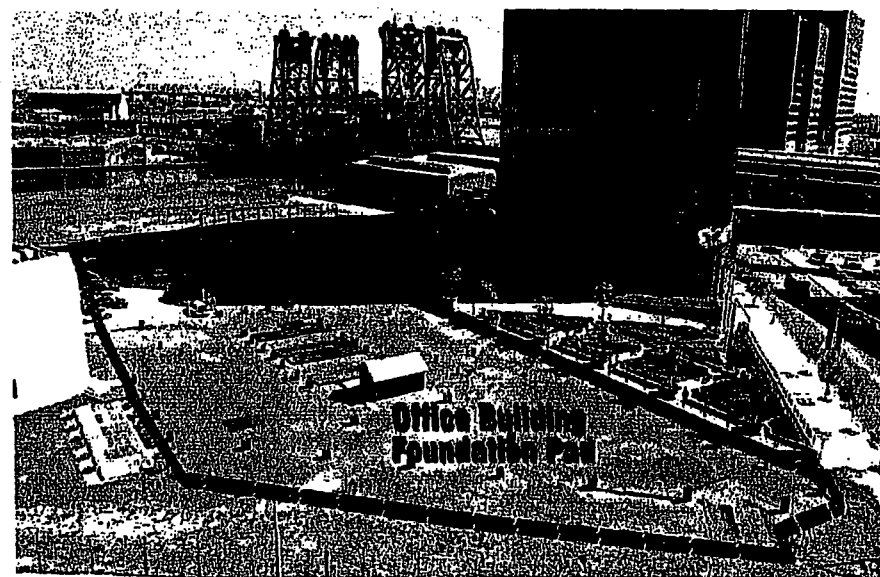
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Passaic Riverfront Revitalization

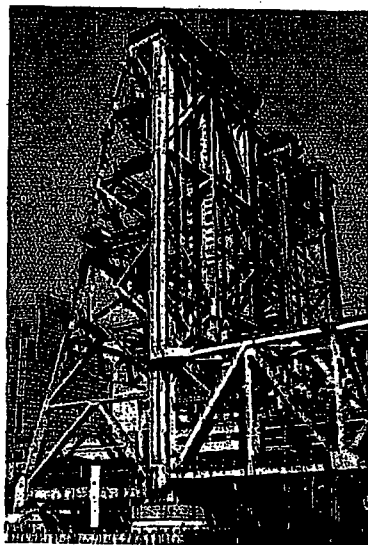
Existing Office Pad

The foundations are in place to construct a 22-25 story, 600,000 sq. ft. office building at the corner of Raymond Boulevard and McCarter Highway next to the Legal Center. This building will provide a sidewall for a plaza space formed with the Legal Center. This building will be in scale with One Newark Center (Seton Hall Law School) which is on the opposite corner.



Riverfront Hotel

A 350-room hotel will be constructed as the focal point of the plaza across from the two office buildings and will be set to take full advantage of the view down river and the historic railroad bridge. One entry to the hotel will be from the plaza through a large round glass lobby structure. Another access point will be from the extended Center Street alongside the riverwalk. Public access between the upper plaza and the riverwalk will be provided by a grand set of exterior steps between the hotel and the second new office structure.



Penn Station Bridge

The Penn Station Railroad Bridge over the Passaic River has a wonderful industrial character and it is listed on the National Register of Historic Places. Currently the bridge shows signs of rust and it looks very poorly. This grand artifact of a previous age can be made an important visual element of the riverfront. Painting and lighting the structure in a bold manner will highlight its sculptural qualities. Recently NJ Transit installed commercial space under the railroad tracks facing Raymond Boulevard. This commercial space should also open onto the riverwalk under the tracks.

Office Structures

Two additional office buildings are planned for the site. Both of these buildings will front on the river and have access off extended Center Street. Each of these structures will contain approximately 250,000 SF of office area and will be 10 floors high. By keeping the office structures relatively low, views of the river will be preserved for the structures located west of McCarter Highway.

Ground Floor Commercial Use

The waterfront should be a location that encourages a wide variety of people to frequent restaurants and bars, shop in stores, watch activities on the river and take part in cultural events. It should be a place to walk and stroll, sit and watch other people. People should think of the waterfront as a delightful urban space with lots of interesting events and activities. To promote this concept the plan provides for extensive commercial space at the base of all

structures proposed for the site. Shops and services will line Center Street and encourage a visitor to walk from Penn Station to the NJPAC. Special effort has been made to design the base of buildings and the corners of structures to provide special locations for commercial activities. There will be free-standing kiosks and vending stalls in the public space to provide additional commercial activity. Along the river's bulkhead, provisions will be made for dinner boats and restaurant/bar barges to tie up and attract people walking along the waterfront.

Parking

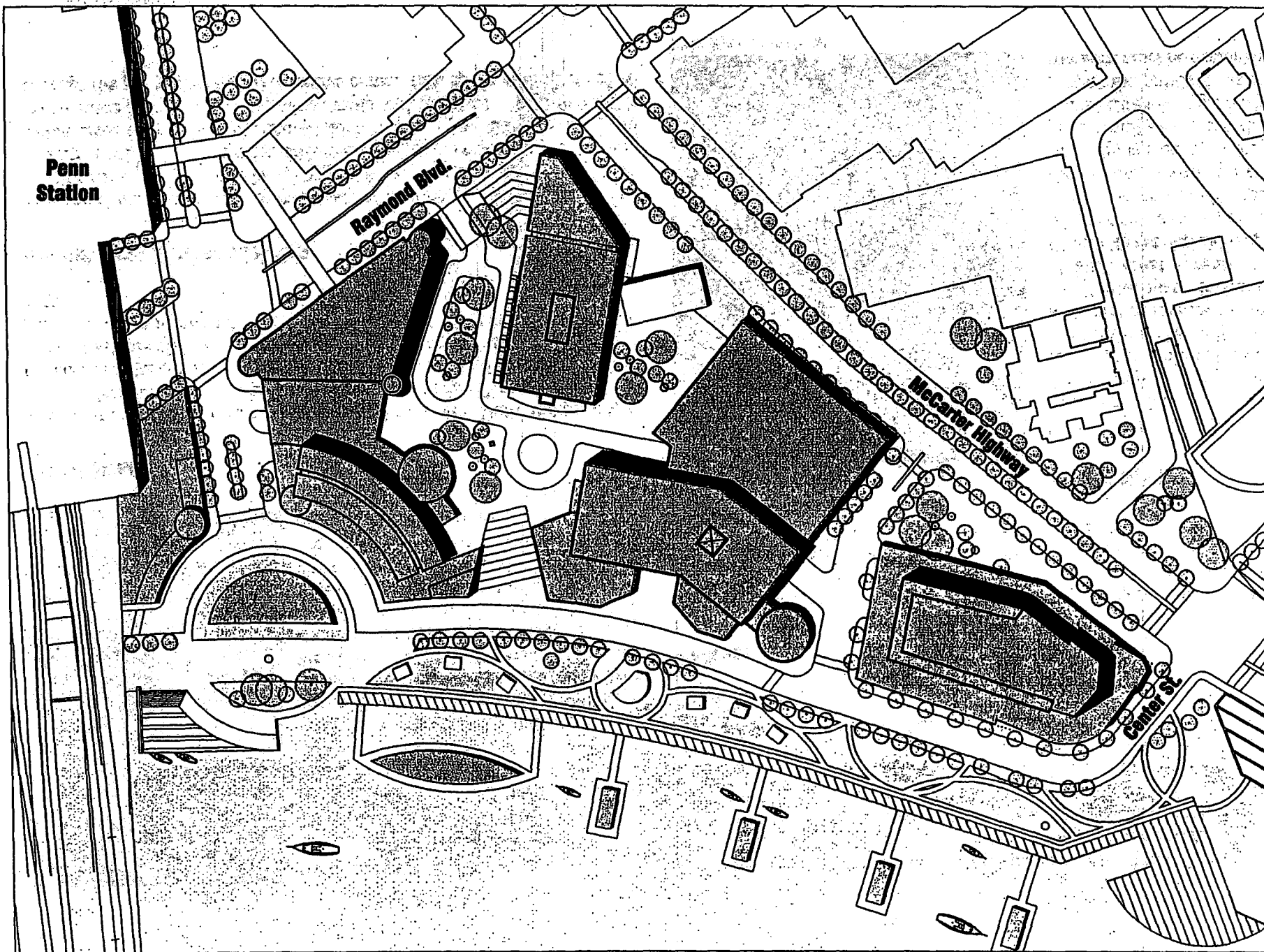
A 1,000 car multi-level garage is proposed for a site along McCarter Highway next to the Don Pepi Restaurant. Autos will enter the garage structure off a service drive from McCarter Highway and/or a service road, which intersects Raymond Boulevard and runs under the elevated plaza.

Design Quality

The New Jersey Performing Arts Center has set a new level for design quality for projects to be located along Newark's Waterfront. The design effort and level of investment given the public space in front of NJPAC must extend along Center Street and all the public space along the waterfront. The design of the public space, the streets, plaza, and walkways will set the tone for the private buildings. In order to attract Class A tenants to the project the public space environment must be exemplary.



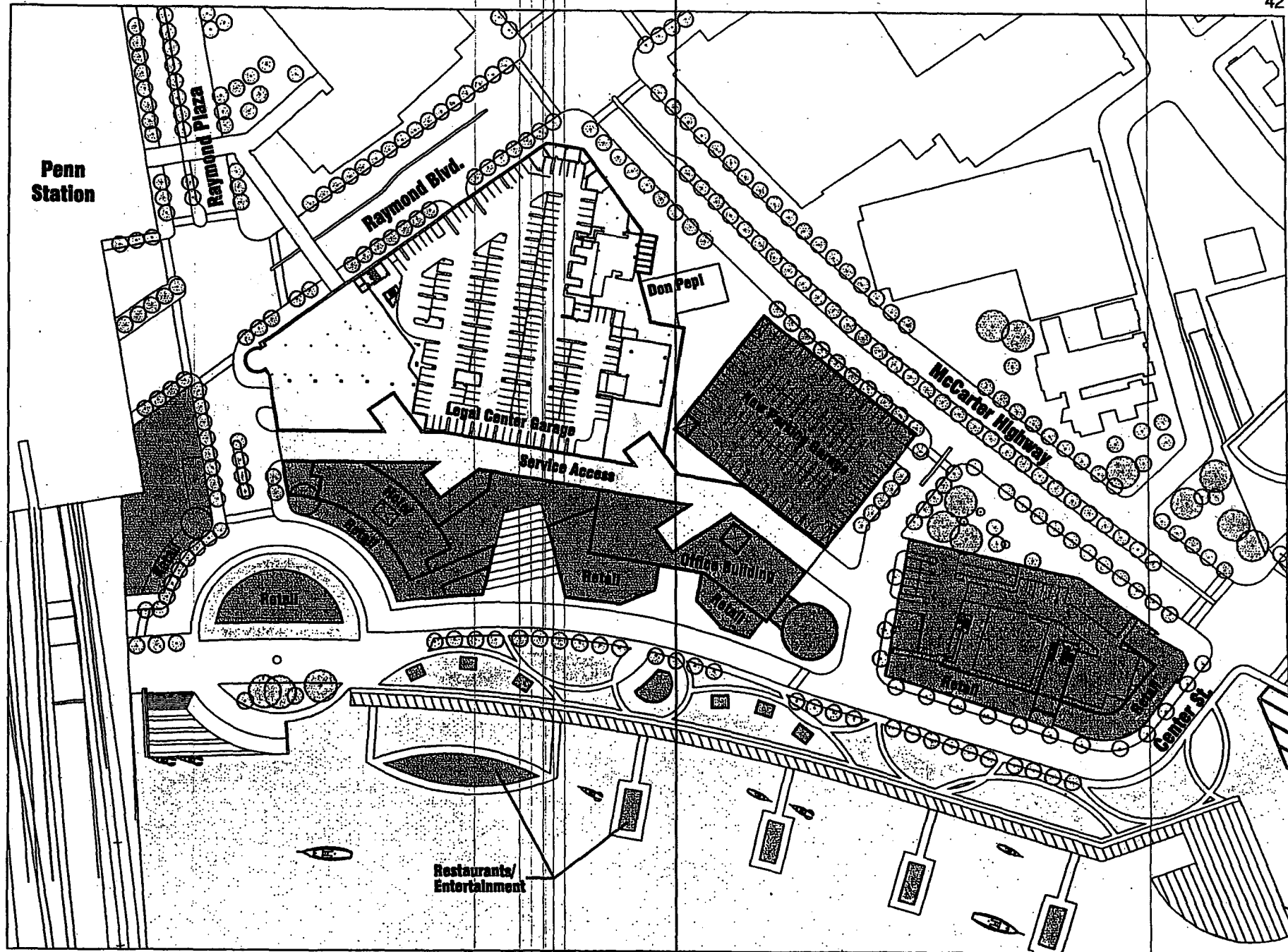
View of proposed hotel



RIVERFRONT PLAZA - CONCEPT PLAN

Passaic Riverfront Revitalization

Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn

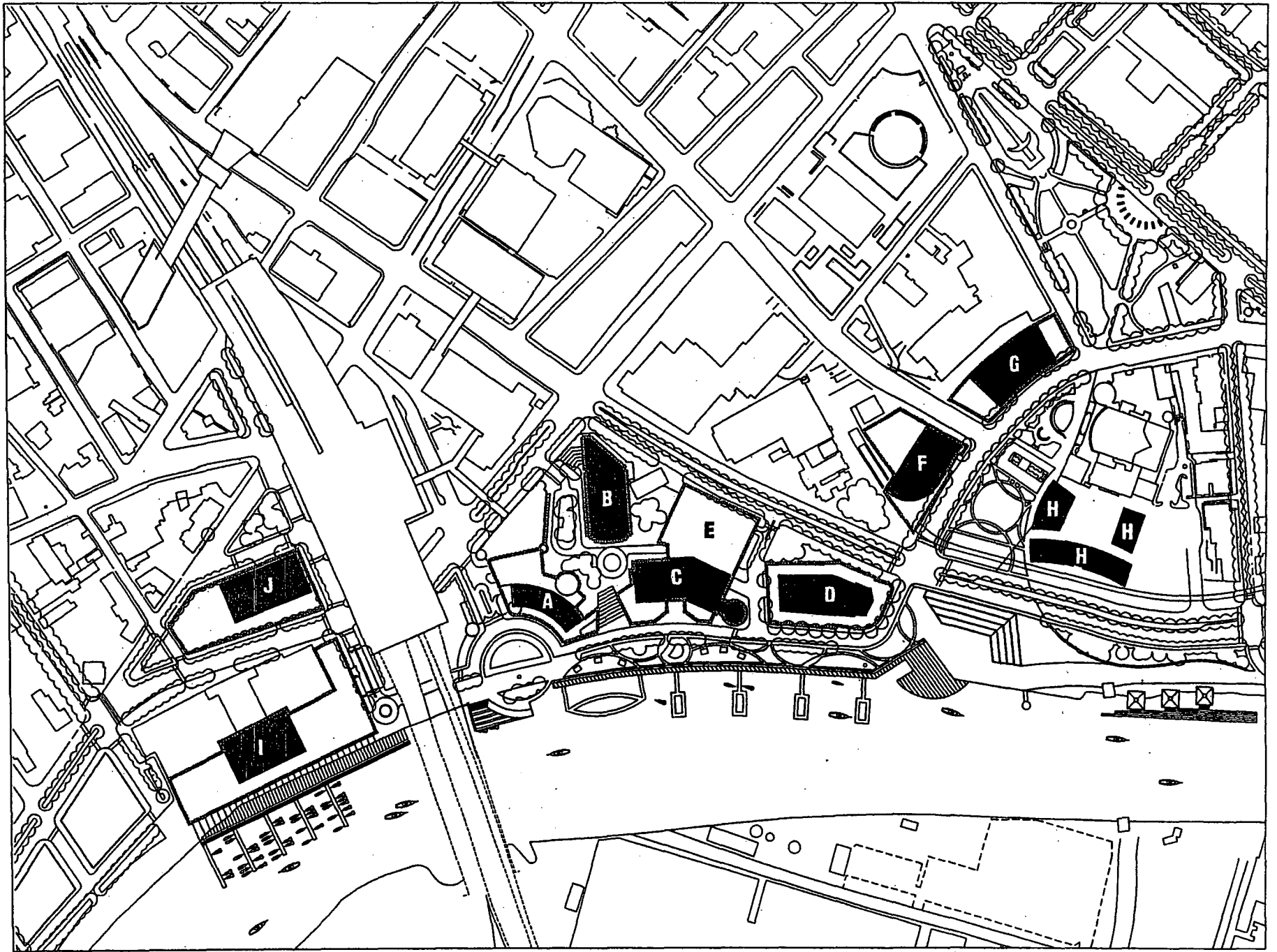


RIVERFRONT PLAZA - PARKING PLAN (LOWER LEVEL)

Passaic Riverfront Revitalization

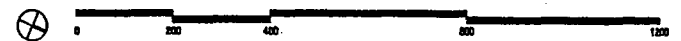


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DEVELOPMENT SITES

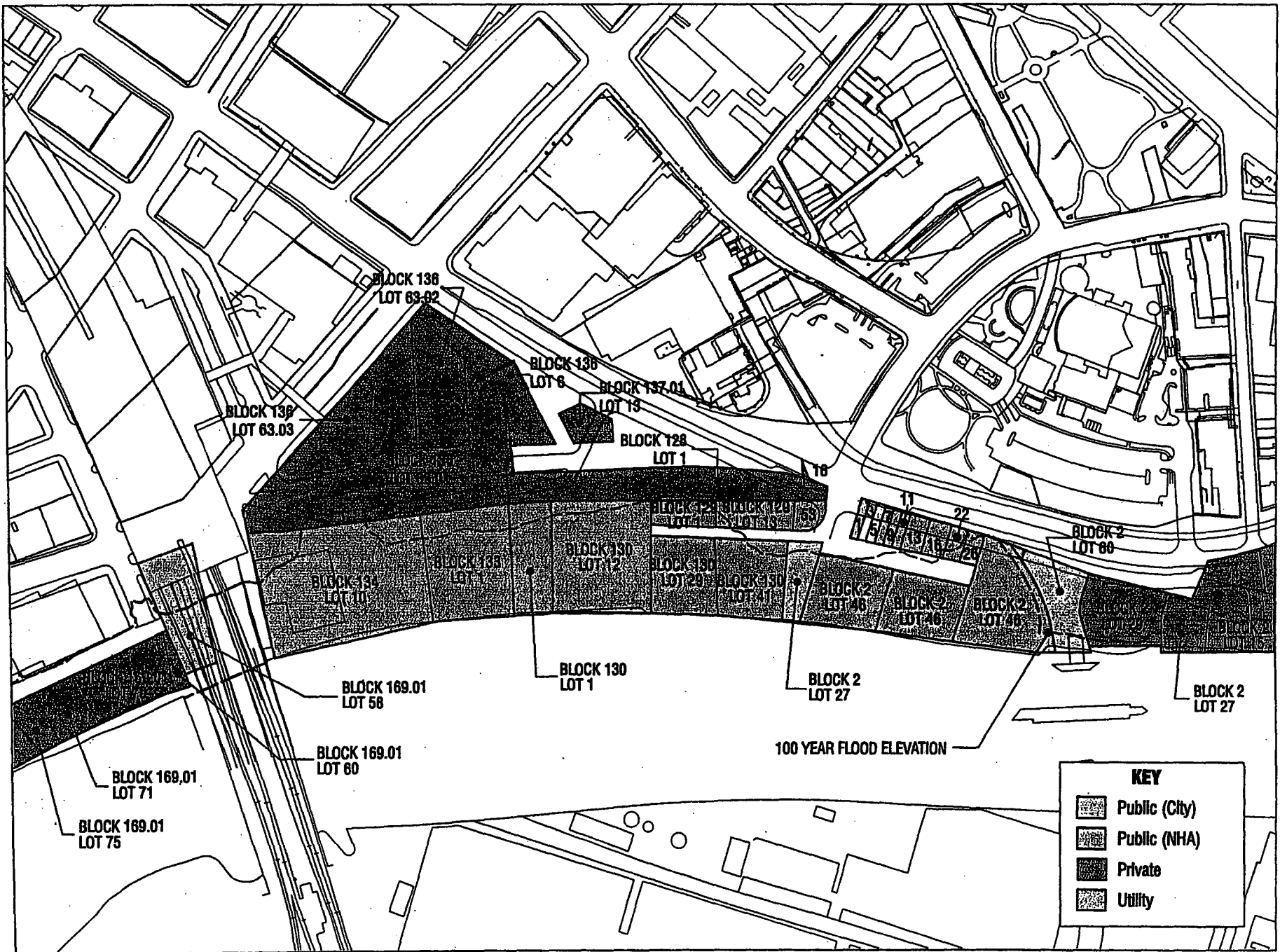
Passaic Riverfront Revitalization



Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn

Development Summary

Facility	Building Area	Typical Floor Area	Height	Estimated Development Cost
A. Hotel (350 Rooms)	175,000 sf	12,500 sf/fl	14 floors	\$35.0 Million
B. Office Building (Existing Pad)	600,000 sf	30,000 sf/fl	20 floors	\$105.0 Million
C. Mixed-Use				
Office Tower	250,000 sf	25,000 sf/fl	10 floors	
Retail Base	15,000 sf	15,000 sf/fl	1 floor	
Sub-total	265,000 sf			\$46.4 Million
D. Mixed-Use (GSA)				
Office Tower	220,000 sf	22,000 sf/fl	10 floors	
Retail Base	10,000 sf	10,000 sf/fl	1 floor	
Parking	250,000 sf	52,000 sf/fl	5 floors	
Sub-total	480,000 sf			\$50.3 Million
E. Parking Structure 1,000 Spaces	320,000 sf	35,500 sf/fl	9 levels	\$12.0 Million
F. Mixed-Use (NJ PAC)				
Office Tower	250,000 sf	25,000 sf/fl	10 floors	
Retail Base	15,000 sf	15,000 sf/fl	1 floor	
Parking	235,000 sf	50,000 sf/fl	5 levels	
Sub-total	500,000 sf			\$55.8 Million
G. Mixed-Use (NJ PAC)				
Office Tower	250,000 sf	25,000 sf/fl	10 floors	
Retail Base	15,000 sf	15,000 sf/fl	1 floor	
Parking	200,000 sf	43,000 sf/fl	5 levels	
Sub-total	465,000 sf			\$54.4 Million
H. Mixed-Use/Residential (NJ PAC)	450,000 sf	Varies	6-25 floors	\$78.8 Million
I. Office Building (Hartz)				
Office Building	350,000 sf	25,000 sf/fl	14 floors	
Parking	400,000 sf	100,000 sf/fl	4 levels	
Sub-total	750,000 sf			\$77.3 Million
J. Office Building (Edison Properties)				
Office Building	250,000 sf	25,000 sf/fl	10 floors	
Parking	350,000 sf	70,000 sf/fl	5 levels	
Sub-total	600,000 sf			\$57.8 Million
Total	4,605,000 sf			\$572.8 Million



LAND OWNERSHIP PARCEL MAP

Passaic Riverfront Revitalization



Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn



View of proposed riverwalk

Implementation

Development of the Newark Riverfront will generate a tremendous amount of private investment. This plan illustrates that the area can accommodate a new hotel, 8 mixed-use office and/or residential structures plus a major parking facility. The total building area is approximately 4.6 million square feet which generates a total building cost, excluding land and soft costs, of \$572.8 million. When complete, the hotel and office structures will bring 10,000 – 12,000 new jobs for office and hotel workers into the riverfront area.

Getting a project of this magnitude implemented will take a major effort from both the public and private sector. Nothing will be accomplished on the riverfront unless a true public-private partnership can be forged to promote the master plan. Implementation of the master plan should proceed on three levels simultaneously –

- Prime Development area
- Minish Park area
- Passaic River State Park

The exact boundaries between these three levels of development are not clearly defined. There will be an overlap of efforts. Progress on one level will support the other two levels of development.

It is important to implement a critical mass of construction on the prime development area as quickly as possible to demonstrate that this project is going to be a reality. Following is an outline of the steps needed to be taken to get construction started.

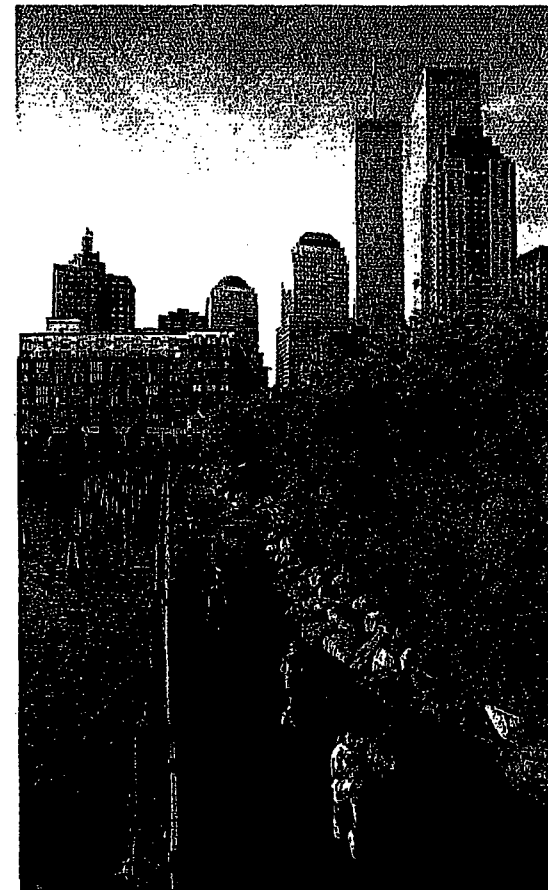
Prime Development Site

- A proposal has been made to the Federal General Services Administration to build a 220,000 sf office structure on land owned by the Newark Housing Authority at the corner of McCarter Highway and the extended Center Street. If this proposal is accepted, it will generate an immediate need to build the public improvements along the river including Center Street and the walkway.

- PSE&G owns a 4.27 acre site located between the Legal Center Service Road and the river. Control of this land must shift to some entity such as the Newark Economic Development Corporation (NEDC) who will be able to deal with the site's complex development issues. Private developers must be identified for the hotel and office building which are partly located on PSE&G property and partly on NEDC property.
- A NJDEP Waterfront Development permit application which covers all the proposed construction within the Prime Development Area must be filed and approved. The City's redevelopment plans for this area must be revised to reflect development plans.
- Cross-easements and development contracts must be worked out with NEDC and NY-NJ Port Authority to allow expansion of the existing Legal Center Plaza, garage and service area.
- A major tenant needs to be identified to allow the existing 30,000 sf building pad at the corner of Raymond Boulevard and McCarter Highway to proceed to construction with a tower of 600,000- 650,000 sf.
- A financing and cost sharing plan must be created for the 1,000 space garage to be built along McCarter Highway.

In order to generate the scale of private investment envisioned by the master plan in the Prime Development Area, a method for funding the public improvements along the river must be identified. The public improvements include all construction between the bulkhead and the face of the new buildings such as the riverwalk, extended Center Street, landscape, lighting and plaza areas. In addition, the public improvements include all the elements located along the riverfront designed to generate activity on the water including docks, marinas, floating restaurants and bars. The total cost for public improvements between Bridge Street and Jackson Street is estimated to be \$59.4 million. The following Cost of Public Improvements chart shows how the overall project can be divided into 3 sections. Section 1, which costs \$31.9 million and covers the area between Penn Station and the extended Center Street is critical to the proposed hotel and office structures.

One source for funding the type of public improvements described in the master plan is the Federal Transportation Equity Act for the 21st Century (TEA-21). In TEA-21, the U.S. Congress has recognized that transportation initiatives must include consideration of our natural environment and the characteristics of surrounding communities. New Jersey has formulated a vision for the 21st Century known as New Jersey FIRST in which transportation is no longer treated as simply a way to travel to and from communities. We must view transportation as a way to enhance our economy and our quality of life.



Battery City Park Esplanade, NY, NY

Given the transportation improvements which are being planned for the area along the Passaic Riverfront including the reconstruction of McCarter Highway, construction of the Newark-Elizabeth Light Rail Line, and improvements to Penn Station it is clear that the Passaic Riverwalk would qualify as a TEA-21 project. The merit of funding the riverwalk as a transportation enhancement is increased with the provision of water taxi service connecting points on the Passaic such as Penn Station with other commercial centers – Jersey City, Hoboken and New York City.

Garden State Preservation Trust

New Jersey voters strongly supported the November 1998 referendum to preserve a million acres of land from development and to spend \$180 million a year over the next ten years for acquisition of public lands, farmland and historic preservation. The legislation implementing the referendum's result, enacted in June 1999, specifically earmarks a proportionate amount for urban aid municipalities such as Newark and Paterson. In addition to funding local acquisition and development projects, the act also increased funding for state acquisition projects.

The Green Acres Program, an agency in the NJ Department of Environmental Program, is responsible for the administering the process of application review and recommendation for funding. The Green Acres Program has established a set of planning objectives that speak directly to the Riverfront Plan. These include:

- To promote the economic health and quality of life of the state's urban areas by providing assistance for open space preservation and park development as integral components of urban revitalization efforts.
- To create an interconnected system of public and private lands and greenways to protect water quality, biodiversity, and landscapes and to preserve open space and provide recreation opportunities.

Their ranking system places high priority on waterfront access, open space corridors, urban parks and connection with historic and cultural resources – all components of the Passaic Riverfront. The opportunities for funding the acquisition and development of the Riverfront have never been greater. Tied together with TEA-21, Green Acres funding provides a method of garnering sufficient resources to implement much of the Riverfront Plan.

Joseph G. Minish Park

The total cost of the Joseph G. Minish Park including the bulkhead and riverwalk has been estimated by the Army Corps of Engineers at \$78.8 million. If this funding can be obtained, it will cover a substantial part of the cost of the riverwalk in the prime development area. Additional public funding will be needed to expand the Legal Center Plaza and construct the extended Center Street. The City working with its Congressional delegation and Senators must push for full funding for this project either through the TEA-21 program and/or the Army Corps of Engineers.

Passaic River State Park

Looking at the Passaic one can see that the redevelopment of the Newark Riverfront would benefit greatly if the vacant and underutilized Harrison Riverfront could be redeveloped. Harrison has prepared a redevelopment plan for its riverfront and work on the Newark side will help their efforts. The fact remains that the redevelopment of all the banks of the Passaic River is beyond the reach of the individual municipalities. The individual towns and cities need both financial and regulatory assistance from the State of New Jersey to realize the full benefits of the river corridor.

Newark should take the lead to convene a meeting of the other 15 Passaic River communities to discuss how they might work together to improve conditions along the Passaic. Part of the program would be to discuss the possibility of creating a Passaic River state park which would link the efforts of individual municipalities into a linear park system extending 20 miles on both sides of the river. Just as the State of New Jersey has played a role in developing a riverwalk along the Hudson River from Jersey City to the George Washington Bridge, it is appropriate that the State play a major role in the revitalization of the Passaic River.

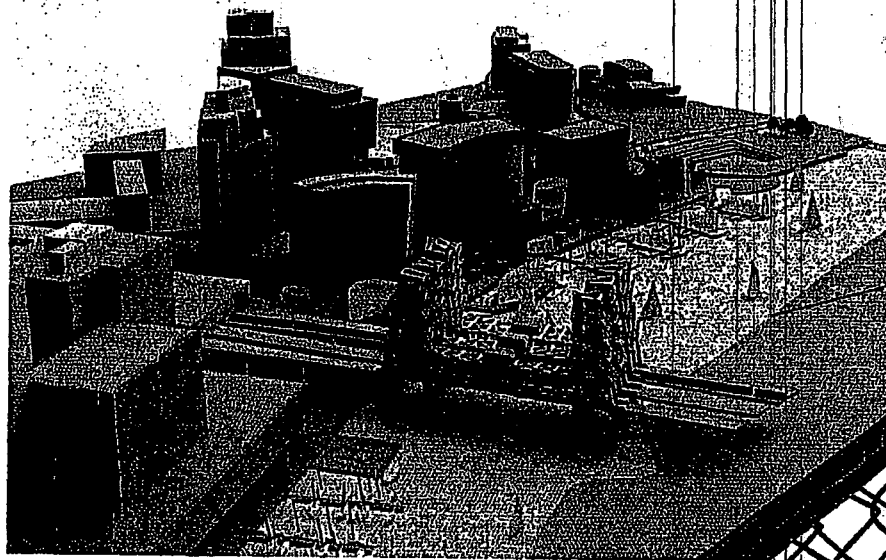
Cost of Public Improvements

Cost Item			Section 1 Penn Station to Center Street	Section 2 North of Center Street to Clay Street	Section 3 South of Penn Station to Jackson Street
General Construction			\$18,842,152	\$9,753,482	\$4,801,482
Design Contingency		10%	\$1,884,215	\$975,348	\$480,148
Sub-total			\$20,726,367	\$10,728,830	\$5,281,630
General Conditions		15%	\$3,108,955	\$1,609,325	\$792,245
Sub-total			\$23,835,322	\$12,338,155	\$6,073,875
Overhead & Profit		8%	\$1,906,826	\$987,052	\$485,910
Sub-total			\$25,742,148	\$13,325,207	\$6,559,785
Construction Bond		1.50%	\$386,132	\$199,878	\$98,397
Sub-total			\$26,128,280	\$13,525,085	\$6,658,181
Escalation-mid construction 04/2002		10%	\$2,612,828	\$1,352,509	\$665,818
Sub-total			\$28,741,108	\$14,877,594	\$7,324,000
Construction Contingency		10%	\$2,874,111	\$1,487,759	\$732,400
Sub-total			\$31,615,219	\$16,365,353	\$8,056,400
Total Cost			\$31,615,219	\$16,365,353	\$8,056,400
Artwork		1%	\$316,152	\$163,654	\$80,564
Sub-total			\$31,931,371	\$16,529,007	\$8,136,964

Total Project Cost Phases 1-2-3 \$56,597,342

Phasing Contingency 5% \$2,829,867

Total Project Cost \$59,427,209



Regulatory Issues

Development along the Passaic River in Newark must comply with the NJDEP Rules on Coastal Zone Management NJAC 7:7, et. seq. and obtain a NJDEP waterfront development permit. Following is an outline of the significant provisions of the NJDEP waterfront development regulations and the impact of the rules on proposals for the revitalization of the waterfront.

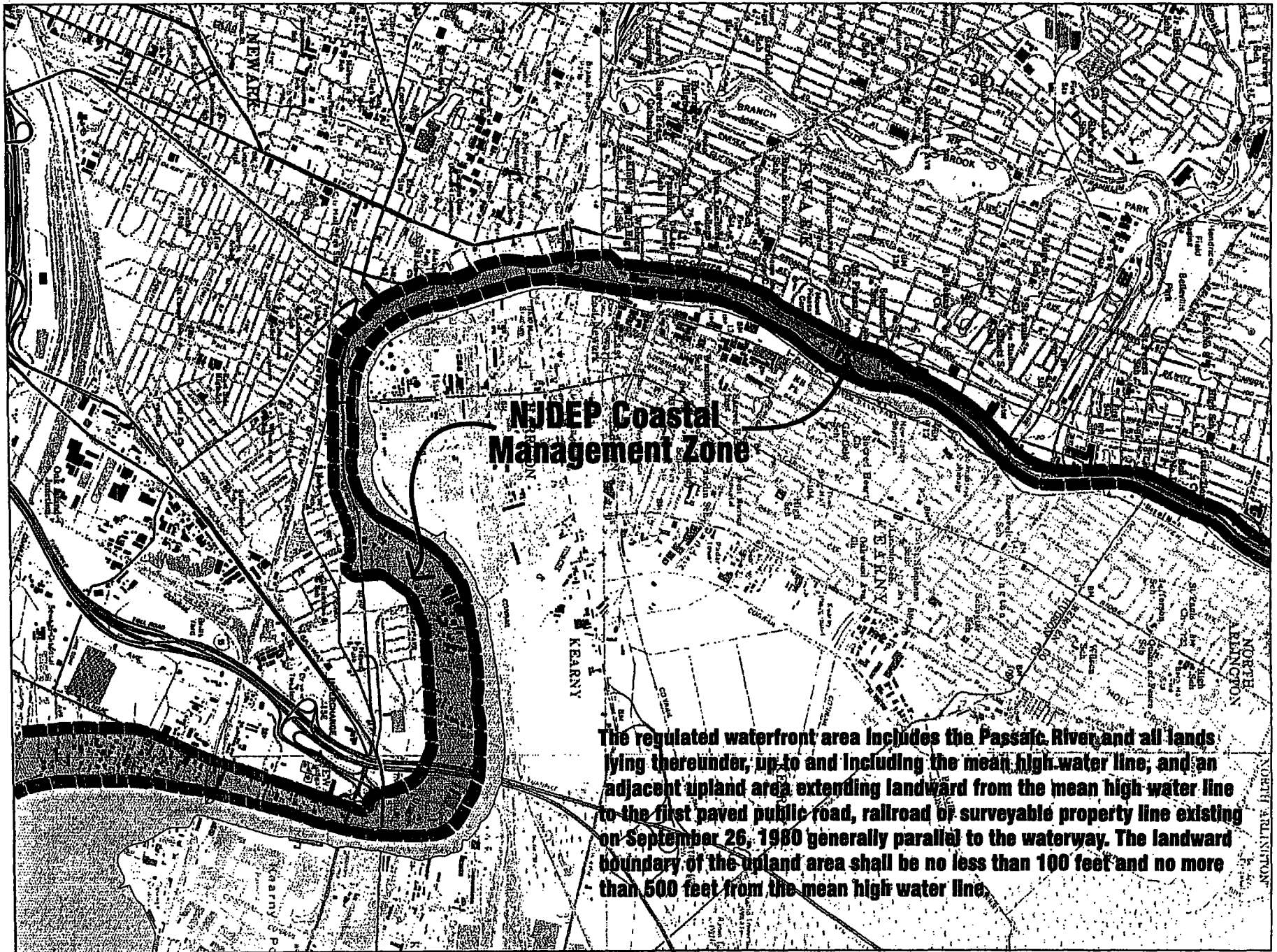
7:7E-3.43 Special Urban Areas

Newark is classified as a Special Urban Area. The rules encourage economic, social and neighborhood development. Housing, hotels and mixed uses are acceptable in *Filled Water's Edge* areas if public access provided. We assume within the main study area office buildings with structured parking facilities will be an acceptable use.

7:7E-3.23 Filled Water's Edge

Newark's waterfront is comprised of areas that have been bulkheaded and filled. Thus, the whole Passaic riverfront in Newark is filled water's edge. This area stretches from the bulkhead to the first paved public road or parallel property line as of 9/26/80. The *waterfront portion*, within 100 feet of the Passaic River, is required to be developed with water-dependent uses or left undeveloped. However, this width may be reduced in some areas if enlarged commensurately in other areas, pursuant to the "averaging" guidelines. If the upland portion is 10 acres or more, then the waterfront portion may be reduced in width. A walkway of at least 30 feet in width classifies as a water dependent use. Public access must be provided. The highest intensity development is permitted:

Max. Impervious Cover	80%
Max. Pervious Paving	90%
Min. Herb & Shrub Cover	5%
Min. Forest Cover (trees)	5%



NJDEP COASTAL MANAGEMENT ZONE

Passaic Riverfront Revitalization



0 1500 3000 6000 9000

Clarke Caton Hintz | Ehrenkrantz Eckstut & Kuhn

The Newark Waterfront plan will require a continuous pedestrian access way (minimum 30'-0" wide) along the bulkhead. This pedestrian access way may be wider than 30'-0" but within 100'-0" of the bulkhead the Plan may allow an access road, parking and/or building structures.

7:7E-3.25 Flood Hazard Areas

Undeveloped areas (unpaved/unbuilt) within 100 feet of the water cannot be developed, except for water-dependent uses or low intensity development (3-5% built/paved). Undeveloped flood hazard areas beyond 100 feet from the water's edge may develop at a maximum intensity of 30-50% built/paved surfaces. Developed flood hazard areas may develop further, but shall not exceed maximum permitted intensity (80%).

From historic maps, drawings and photos it is known that the entire riverfront of the City of Newark has been developed at one time or another, regardless of its present state. On some sections of the waterfront the Master Plan will propose intense mixed use development and other sections will be permanent open space. It is expected that NJDEP will review the Newark Plan as a total concept and allow intense development in appropriate locations.

Fill Restrictions in Flood Hazard Area

Based on NJDEP Delineation of Floodway and Flood Hazard Area Maps of the Passaic River prepared in 1978, the Passaic River is designated tidal. The River's floodway is delineated at the bulkhead. The flood hazard area extends to elevation 10.2 which is equivalent to the 100 year flood elevation.

Unlimited fill is permitted within the flood fringe (area between the floodway and the flood hazard line) because the river is designated tidal.

Use Rules

7:7E-7.2 Housing

Housing is an acceptable use if public access is provided and the rules on the intensity of development are met. The plan should support public transportation, including bicycle facilities & pedestrian amenities.

7:7E-7.3 Resort Recreational Use

Each municipality should contain at least one waterfront park on each body of water. Water-dependent recreation is encouraged.

7:7E-7.5 Transportation

New roads should be determined by a clear need. They should include provision for bicycle and footpaths, where feasible. Vehicular access and parking to the Passaic should be provided. Visual and physical access to the waterfront should be maintained. Improved public transportation facilities are encouraged. Alternative modes and inter-modality is encouraged.

Newark's Waterfront Plan will propose a new access road to service development and open space areas.

7:7E-7.10 Commercial Facilities

New hotels, motels and restaurants are conditionally acceptable. Retail and trade services are conditionally acceptable.

Newark's Passaic Riverfront Revitalization Plan will not try to determine exact building use but rather encourage a mix of office, retail, restaurant, hotel and cultural activities.

7:7E-7.14 High-rise Structures (> 6 stories/60 feet)

High-rise structures are conditionally acceptable, provided there is a road or equivalent public open area of at least 50 feet between the structure and the water. Hi-rises should be oriented with their longest dimension oriented perpendicular to the shoreline and should not block the views from existing residential structures.

This rule contemplates beachfront development and should not apply to the Passaic Riverfront. The buildings proposed along the Newark Waterfront will be compatible with the height of other buildings in the adjacent neighborhoods or downtown area.

Resource Rules

7:7E-8.7 Storm Water Management

The Newark waterfront is tidal, therefore development on the upland areas adjacent to the waterfront is not subject to the flood control standards of the act.

Notwithstanding its tidal nature, development on the waterfront is required to comply with the standards for water quality, which require that post-development water quality (as measured in total suspended solids) is not lower than the predevelopment quality.

Storm Water Management will be designed taking into consideration all the property within the study area, and storm water management issues of more intense development sites may be solved using open space areas or underground control structures.

7:7E-8.8 Vegetation

Development of the study area will be required to preserve as much existing plant material as practical. Re-vegetation with native, indigenous species should be undertaken as part of site development.

Very little, if any, native vegetation exists due to the history of industrial development of the Passaic River corridor. Plantings will be provided, as individual sites are developed, which are culturally suited to the urbanized conditions presently found along the riverfront.

7:7E-8.11 Public Access to the Waterfront

Development must provide permanent perpendicular and linear access to the waterfront to the maximum extent practicable, including both physical and visual access.

7:7E-8.12 Scenic Resources and Design

New buildings should be visually compatible with the environs. The Passaic Riverfront is not subject to the more restrictive criteria in 7:7E-8.12(d).

7:7E-8.13 Buffers

Buffers will not be required because redevelopment seeks to integrate existing and future uses and facilities, resulting in a positive impact on the riverfront and the city.

7:7E-8.14 Traffic

Development should be designed to minimize disturbance to the existing traffic systems. Alternative modes should be incorporated into new development. Sufficient off-street parking shall be provided.

Acknowledgements

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La Casa de Don Pedro
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